GAUHATI FROM THE NORTH BANK OF THE BRAHMAPUTRA.

ASSAM DISTRICT GAZETTEERS.

VOLUME IV.

Kamrup.

BY

B. C. ALLEN, B. A., C. S.

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PREFACE.

To those unacquainted with Assam it may perhaps seem strange that no directory should be attached to the Gazetteer of Kamrup. There are, however, only two towns in the district, Gauhati and Barpeta, and they have been described at length. One green village is very much like another green village, and none possess such distinctive characteristics as would justify a separate and detailed description. Reference has, however, been made to all villages by name, which are noted either as trade centres of importance or as the seats of some particular industry. My acknowledgments are due to Mr. Jackson, Deputy Commissioner, and Mr. Barnes, Settlement Officer of the district, who have been so good as to examine the Gazetteer in proof.

SHILLONG :
June 4th, 1905.

B. C. ALLEN.

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CHAPTER I.

PHYSICAL ASPECTS.

Area—General appearance of district—Hills—Rivers—Marshes—Geology—Climate and rainfall—Earthquakes—Fauna.

Area and boundaries.

The district of Kamrup lies between 25° 43′ and 26° 53′ N. and 90° 39′ and 92° 11′ E. and covers an area of 3,858 square miles. On the north it is bounded by Bhutan, on the east by the districts of Darrang and Nowgong, on the south by the Khasi Hills, and on the west by Goalpara.

Kamrup, a plain with mountains in the south.

The greater part of Kamrup consists of a wide plain, through the lower portion of which the Brahmaputra makes its way, flowing a steady course from east to west. South of the river this plain is much broken up by hills. The two Chamaria mauzas are low swampy tracts, but below the trunk road there is hilly, almost mountainous, country; and near the southern frontier of the district there are peaks over 3,000 feet in height. These peaks form an integral part of the Assam range, but, east of Palasbari, isolated hills crop up above the alluvium, and at Gauhati reach right down to the water's edge. They even appear on the north bank of the Brahmaputra; and in the Patidarang tahsil, south of Kamalpur, and in the Hajo tahsil, east of Hajo, there are several hills, some of which are as much as 1,000 feet in height.

The flooded tracts near the river.

North of the river the plain falls roughly into three sections. In places, and more especially in the neighbourhood of Gauhati, the river flows between high banks, which are only overtopped by a heavy flood. In the western part of the district a belt of marshy country, which is subject to inundation in the rains, lies on either side of the cold weather channel. The soil of this flooded tract is composed of a mixture of sand and silt, which in its natural state is covered by a dense growth of *nal*, *ikra*, *tora pat*, and other reeds and grasses. This jungle is absolutely impenetrable to a man on foot, unless he gropes his way along the tunnels that have been made through it by the buffaloes that are occasionally to be found in this locality; but from time to time patches of it are cleared and burnt, and are sown with summer rice or mustard. These fields afford a pleasant change to the interminable waste of reeds and grasses. They are surrounded by a thick wall of jungle, and generally contain a few huts, in which the husbandmen take up their quarters during the cold weather.

The central plain and the Kachari mara.

The central portion of the district is a densely populated plain, covered as far as the eye can reach with fields of waving rice, and dotted over with the groves of graceful bamboos which conceal the houses of the cultivators. The land is beyond the reach of flood; there is little of marsh or forest, and nothing to interfere with the operations of the farmer. This densely populated tract does not, however, stretch right up to the Bhutan Hills. The Gohain Kamala Ali is said to have been laid down

by the great Koch king, Nar Narayan, as the boundary beyond which the Kacharis should be allowed to practice their ancestral rites; and the country between the Gohain Kamala Ali and Bhutan is still to a great extent Kachari territory.

Hindus are very reluctant to settle there, as they think, and rightly so, that this part of the district is far from healthy for any one but the Kachari. The causes of this unhealthiness are not quite clear, but, according to the Hindus, are to be found in the fact that the evil spirits who haunt the place can only be properly appeased by the Kachari Pujas. It is possible, too, that a dread of Bhutia aggressions may still linger on, and it is certain that, on social grounds, the Assamese Hindu would be very reluctant to make his home amongst unconverted tribesmen. But, whatever it may be to the Hindu, to the European officer in the winter this country is far from unattractive. The level of the plain rises as it approaches the hills, and the light and sandy soil is covered with short turf or patches of *ulu* and thatching grass. The Kachari hamlets are dotted here and there over these grassy commons, each surrounded with a bank and fence, and differing in this respect from the straggling villages of the Assamese. They stand up boldly against the sky line, and, as pigs and poultry are not compatible with gardens, there is none of that wealth of fruit trees which surround the houses of the villagers in the central portion of the district. Rice is grown in fields which are irrigated from the numerous streams that issue from the hills, and in the winter the ground is bright and the

air fragrant with mustard. The mountains rise like a rampart on the north, and there is nothing in these fresh and breezy uplands to suggest that they are in any way inimical to human life.

The country in the south bank.

South of the Brahmaputra the scenery could not fail to charm every lover of the picturesque. Valleys of waving rice run up between hills which rise abruptly from the plain. The sides of these hills are steep, almost precipitous, but, wherever they can find a foothold, huge trees have thrust their gnarled roots amongst the rocks, and the hill is covered with forest interspersed with bamboos and the beautiful foliage of the creeping cane. There is none of that dreary expanse of plain which in other parts of India grows so tedious. The hills are never out of sight, and even the plain is picturesque enough, as it is much broken up by forest, swamps, and *bils*.

Mountains.

Except to the south of Dewangiri, where the boundary was pushed forward into the hills after the Bhutan war of 1863, no portion of the Himalayas falls within the district, and the mountain system of Kamrup consists of a section of the Assam range, and of a few outlying hills which crop up above the alluvium on both sides of the river. The fringe of the Assam range consists of ridge upon ridge of hills, all of them covered with dense tree forest and bamboo jungle, which gradually sink from peaks, two or three thousand feet above the level of the sea, to hillocks, whose tops are barely as many hundred feet above the flat alluvial plain. But, in addition to

these mountain ranges, isolated peaks and ridges are to be seen dotted about the plain south of the Brahmaputra, more especially in the Gauhati tahsil.

Many of these hills are thought to be sacred to various members of the Hindu pantheon. In the Chamaria mauzas there is the Buragohain parbat, which is said to be particularly dear to Siva, to whose honour a temple has been erected at its foot. The Gumi hill, so the local folklore goes, was the haunt of a pair of cobras who troubled the people in the days of Sib Singh. A party of soldiers was deputed to destroy them, but though they succeeded in despatching the female cobra (*gumi*), the male escaped to Dalgoma in Goalpara. In Chaygaon there is another Buragohain hill sacred to Siva, and a hill called Gobardhan, which is consecrated to Vishnu. In Boko there is a hill sacred to Parvati, which also bears the almost generic title Buragohain, and has a temple to the goddess on its summit; and in Luki and Bekeli, to the west, there are several holy hills such as Thakurpara, Tiniboini, Buragohain, Chilali, Borua, and Chamua.

In Palasbari the Dakhola hill is consecrated by the presence of a lingum, and the Maliata hill is sacred to the goddess Bagheswari. In the Gauhati tahsil the Dhomara hill is said to be dear to Durga, while the famous hill of Nilachal, a little to the west of Gauhati, is supposed to contain no less interesting a relic than Sati's organs of generation, which fell on that spot when her body was hewn in pieces by Vishnu. The

place has in consequence been an object of pilgrimage to many generations of Hindus, and its beautiful summit is dotted over with temples. In the Hajo tahsil there are several hills of mythological importance The hill at Hajo itself, which is known as Kedar, or Kameswar, contains a temple which is an object of reverence to Buddhists and Hindus alike, while Siddheswar and Sanpara are dedicated to Siva. The large hill behind the Hajo bungalow is known as Poa Mecca and is reverenced by Muhammadans, and two small hills close by, called Duni and Muni, are said to have been hallowed by the presence of two famous Rishis. Another hill in this tahsil, which is visible for many miles to travellers coming up the Brahmaputra, is called the Hathimura, on account of its likeness to a kneeling elephant. In Patidarang there are several small ranges which shut in Gauhati on the north, and two of them, Madan Kamdev and Gopeswar, are sacred to the gods whose names they bear.

General appearance of hills.

Most of these hills are some seven or eight hundred feet in height. Their sides are steep and rocky, and they are as a rule clothed in dense tropical jungle, the outlines of the trees being softened and concealed by the dense veil of creepers which binds them into one harmonious mass of green. On some of them are to be found clumps of sal (*shorea robusta*), and here the vegetation is more sparse, as shrubs and brushwood do not thrive in a sal forest. A few of these hills have been planted out with tea, but the slopes were in many cases so steep that the soil was washed away from the roots of the

bushes, and the gardens did not thrive. In the outer ridges of the Assam range Khasis and Garos sometimes raise lac, chillies, betelnut, and vegetables, but the hills as a whole are too steep and unhealthy to be really of much use for agricultural purposes; and, though they would supply good building stone, the demand for that commodity since the earthquake of 1897 has been very limited.

Rivers. The Brahmaputra.

The principal river of Kamrup is the Brahmaputra, which flows right through the district from east to west. At Gauhati it is confined between rocks and hills in a comparatively narrow channel, but even here the breadth of the telegraph wire across the river, measured from post to post, is 1·45 of a mile. Lower down the river spreads itself during the rains over the marshy country on either hand, and, when in flood, the distance from one high bank to the other is very great. It oscillates from side to side of the sandy strath through which it makes its way, its waters are surcharged with matter in suspension, and a snag or other impediment in its course will occasionally give rise to a huge *chur*. These *churs* are sometimes washed away by the next flood, sometimes remain for several years till they have developed into islands covered with reeds and jungle grass. The operations of alluvium and diluvium are continually being carried on on a gigantic scale, islands are formed and destroyed in a single season, new channels are opened and after a time are silted up. But year in year out the Brahmaputra carries down a huge volume of water, and somewhere on its

mighty bosom it is always possible to find a channel for the river steamers.

The Kulsi.

The principal tributary on the south bank is the Kulsi, which enters the district from the Khasi Hills, and flows a northerly course to a point a little beyond Chaygaon. Here it turns west, and, after winding its way through the Chamaria mauzas, falls into the Brahmaputra near the Nagarbera hill. Up to Chaygaon its course lies for the most part through forest clad hills, for whose timber it affords an outlet, but north of the trunk road it passes by villages, *bils*, and stretches of reeds and canes. During the cold weather a boat of four tons burthen can only proceed as far as Kukurmara, but in the rains can get right up the frontier of the district.

The Digru and Juljul-

After the Kulsi, the Digru and the Juljullia are the two most important rivers in Kamrup which fall into the Brahmaputra from the south. The Digru enters the district at Barnihat, where the Shillong-Gauhati road crosses it on a large bridge, flows a north-easterly course to Sonapur, and then turns north to fall into the Kalang, a short distance below the confluence of that river with the Brahmaputra. It is navigable by a boat of four tons burthen as far as Barnihat at all seasons of the year, and affords an outlet to the cotton grown in the lower hills. The western end of the district is drained by the Juljullia, which falls into the Brahmaputra west of the Nagarbera hill. In addition to these main rivers there are numerous other minor streams, but none of them are of very much importance.

The Manas.

North of the Brahmaputra the two great rivers are the Manas and the Barnadi. They originally formed the boundaries of Kamrup to the west and east; originally, because, like so many of the rivers in Assam, they have more than once changed their courses and wandered away from their former channels. The Manas enters the district from the Bhutan Hills, and at a place called Matharguri divides into two branches. The Jia Manas, which is the main stream, flows for a considerable distance through Goalpara, but near its mouth again forms the boundary between the two districts. For the greater part of its course the river flows through jungle, as its repeated divagations render it impossible for permanent villages to be established on its banks. It is thus but little used as a trade route above its confluence with the Chaulkhoa, though a boat of four tons burthen can proceed as far as Bogidara even in the dry season.

The Barnadi.

The Barnadi, like the Manas, rises in the Bhutan Hills, and also follows its evil example of changing its channel from time to time, so that it no longer invariably forms the boundary between Kamrup and Darrang. During the first portion of its course through the plains it flows through tree and grass jungle. Lower down, villages appear upon its banks, though it is only where the channel is fairly permanent that the people care to build their homesteads near the river. It is of considerable value as a trade route, boats of four tons burthen being able to proceed as far as Sonarikhal in the cold weather,

and right up to Malmura Ghat in the rains, and it thus affords an outlet to the rice, mustard, and pulse grown in the interior.

The Chaulkhoa and Pagladiya.

There are numerous other rivers that issue from the Bhutan Hills, but most of them are small and unimportant. Between the Barnadi and the Manas there is a complicated network of shallow streams, which meander over the plain and ultimately find their way into the Brahmaputra, most of them being first collected either in the Hajo Suta or the Chaulkhoa. The latter river flows past Nalbari and Barpeta, and falls into the Manas a little above its confluence with the Brahmaputra. Prior to the great earthquake it was a most valuable trade route into the interior, but during that fearful cataclysm of nature the bed of the river was raised, and, for a time at any rate, traffic was rendered very difficult. Boats can, however, still go up to Nalbari, which is one of the largest markets in Kamrup. The Pagladiya is a river which, as its name implies, has been a continual source of trouble It rises in the Bhutan Hills and ultimately finds its way into the Chaulkhoa, but it seldom remains long in the same bed, and in the course of its vagaries it has more than once converted valuable rice fields into swamp, or, what is even worse, a stretch of arid sand. During the rains it is navigable by boats of four tons burthen as far as Alagjhar.

Other rivers.

Other rivers, which are utilized for the purposes of trade, are (1) the Puthimari, which falls into the Barnadi, and is navigable throughout the year as far

as Tamulpur; (2) the Baralia, up which a boat of four tons burthen can go, even in the cold weather, for twenty-five miles above its junction with the Chaulkhoa; (3) the Kalajal, which flows west of Kamalpur into the Hajo Suta; (4) the Sessa, which is a tributary of the preceding river; (5) the Kaldiya, which passes through Patharcharkuchi and falls into the Chaulkhoa; and (6) the Pohumara, which flows through Bijni and makes its way into the same main drainage channel.

General characteristics of rivers.

Nearly all of these rivers flow on sandy beds along shallow channels, and as a natural result they not unfrequently shift their courses. Many of them, when they first debouch upon the plain, vanish into the earth, and only re-appear again at some little distance from the hills. The soil in north Kamrup is light and gravelly, and the drainage of the Himalayas is dissipated in a number of minor streams instead of being concentrated into two or three fine rivers flowing between fixed banks. This shifting of the river courses and dissemination of the drainage is a phenomenon which is seen to some extent in Goalpara and Mangaldai, but in no district is it found in so pronounced a form as in Kamrup. So ready, in fact, is the water to change its course that one river, the Dekadong, was originally nothing more than a small irrigation channel through which the Kachari villagers conveyed the water to their fields. It started as a little stream a few feet wide, but it has gradually increased in size till it is now a navigable river in the rains.

Bils and Marshes.

There are numerous *bils* and marshes in Gauhati, but no lakes of any considerable size. These *bils* are

generally shallow sheets of water which collect in the centre of a saucer-like basin. The level of a plain on which transplanted rice is grown must of necessity be very low, and a slight additional depression will admit of the retention of water throughout the year. Near the Brahmaputra these *bils* are generally surrounded by a rich belt of pasture land, and are shut in by a wall of elephant grass and reeds. In the higher country near the hills they are sometimes deep ponds, whose length is out of all proportion to their breadth, and are simply the remains of some river which has changed its channel There are altogether 56 *bils* in the sadr subdivision which are large enough to be sold as fisheries, and 55 in Barpeta. One of the largest and best known of all is the Dhipor *bil*, about six miles west of Gauhati. It lies at the foot of the lower ranges of the Khasi Hills, and is a sufficiently pretty and picturesque piece of water. Other important *bils* are the Jahna, the Kukurmara, and the Tanparia in the south-west corner of the Barpeta subdivision, the Kataktoli in Barpeta, the Asuchi in Upar Barbhag, and the Barbila in Hajo

Geology. The hills are for the most part formed of gneissic rocks from which excellent building stone could be obtained. The plain is of alluvial origin, and consists of sand and clay in varying proportions, ranging from pure sand near the banks of the Brahmaputra to a blue clay so stiff as to be utterly unfit for cultivation. Surface lime was discovered at the foot of the Bhutan Hills in 1871 by the Assistant Commissioner of Barpeta. It is of a superior description, but it is believed not to extend over a wide area.

The climate of Kamrup does not differ materially from that of the other districts of Central Assam. Its principal characteristics are a cold and foggy winter, a moderately cool spring, and a fairly temperate but very humid summer. January is the coldest month in the year with an average maximum temperature of 73° and an average minimum of 49°. In March and April the weather begins to grow a little warm, warm, that is to say, in comparison with Dibrugarh, where the average maximum in April is less than 80°, but cool enough in comparison with Upper India. From April to October the average maximum is never less than 87°, and in July it is as high as 91°. During the height of the rains the climate is decidedly oppressive. The air is absolutely saturated with moisture, and the damp heat is trying alike to natives and to Europeans. The average maximum and minimum temperature in each month will be found in Table I. Climate.

In the central portion of Kamrup the rainfall is, for Assam, comparatively low. At Gauhati it is only 67 inches in the year, and at Kamalpur but 65. But, as we approach the hills on either side of the valley, the rainfall gradually increases, and at Barduar to the south it is 89 inches, while at Tamulpur to the north it is 85. Barpeta lying towards the west is even wetter, and has an average fall of 96 inches in the year. From the beginning of November to the end of February there is very little rain, but towards the end of March there are heavy showers. The hot dry weather of Upper India is completely absent, and in April and May the rainfall is so Rainfall.

heavy that it might easily be imagined that the monsoon had broken. No less than 15 inches of rain fall at Barpeta in May, a quantity which actually exceeds the rainfall of August and September. In October the rains begin to stop, and November is one of the driest months in the year. Statistics of rainfall will be found in Table II.

Storms and floods.

Kamrup is seldom visited by violent and destructive storms, though an interval of dry weather in the rains is often closed by a thunder shower, which at once relieves the oppressiveness of the atmosphere, and is thus extremely welcome In March there are often hot unpleasant winds from the west, which in the neighbourhood of the Brahmaputra raise up clouds of sand. The country lying on either side of the river is exposed to injury from floods, which were particularly severe after the earthquake of 1897 had disturbed the levels and silted up the drainage channels This subject is discussed at greater length in the chapter dealing with the agricultural conditions of the district

The earthquake of 1897.

Kamrup, like the rest of Assam, has always been liable to earthquakes, but all previous disturbances of which there is any record were as nothing in comparison with the terrible cataclysm of 1897. This earthquake was felt over an area of 1,750,000 square miles, from Rangoon on the south-east to Kangra on the north-west, from the Himalayas to Masulipatam, and serious damage was done to masonry buildings over an area of 145,000 square miles.* The area of maximum disturbance was a tract of country of the shape of a cocked

* Memoirs of the Geological Survey of India, Vol. XXIX, p. 52.

hat, whose base line ran from Rangpur to Jaintiapur, while the top of the crown was near Barpeta. The shock occurred in Gauhati a little after 5. P M. on June 12th, and was so violent that nearly every masonry building in the town was wrecked. All the public offices collapsed, with the exception of the post and telegraph office, the training school, and the dâk bungalow; and the European residents were rendered homeless. The wall surrounding the jail premises was thrown down, but, strangely enough, the wards, though they are erected on high pillars, were not injured The roads began to crack as ice breaks up on the setting in of a thaw, and the water-supply of the town was thrown completely out of gear. The houses of the villagers, which are made of bamboos and reeds, were not as a rule thrown down, but in many parts of the district the fields were covered with water or deposits of sand. The ordinary drainage channels were choked, the beds of the rivers were raised, and the town of Barpeta, which was built upon comparatively low ground, was at once submerged. The Subdivisional Officer was compelled to take up his residence in a country boat, and it was in these uncomfortable vessels that public business had to be transacted, and even the prisoners lodged. Country boats became, in fact, the cutcherry, the treasury, and the Barpeta jail. The actual loss of life was comparatively small and only 29 deaths were directly attributed to the earthquake. But the damage done to cultivation was considerable, owing to the choking up of drainage channels and the disturbance of the levels of the country.

Fauna.

Wild animals include elephants, rhinoceros, bison (*bos gaurus*), buffalo, tigers, leopards, bears, wild pig, and different kinds of deer, of which the principal varieties are the *barasingha* or swamp deer (*cervus duvauceli*), the sambar (*cervus unicolor*), the hog deer (*cervus porcinus*), the spotted deer (*cervus axis*) and the barking deer (*cervulus muntjac*). Elephants are fairly common, especially near the hills, and when the crops are ripening do much damage unless the numbers of the herds are regularly kept down. For this purpose the district is divided into three mahals or tracts. The right to hunt in each mahal is sold by auction, and the lessee is required to pay a royalty of Rs 100 on every animal captured The method usually employed is that known as *mela shikar*. Mahouts mounted on staunch and well trained elephants pursue the herd, which generally takes to flight. The chase is of a most arduous and exciting character. The great animals go crushing through the thickest jungle and over rough and treacherous ground at a surprising pace, and the hunter is liable to be torn by the beautiful but thorny cane brake, or, were he not very agile, to be swept from his seat by the boughs of an overhanging tree. After a time the younger animals begin to flag and lag behind, and it is then that the opportunity of the pursuer comes. Two hunters single out a likely beast, drive their elephants on either side, and deftly throw a noose over its neck. The two ends of the noose are firmly fastened to the *kunkis*, as the hunting elephants are called, and, as they close in on either side, the captured animal is unable to escape, or to do much injury to his captors, who are generally

considerably larger than their victim. The wild elephant is then brought back to camp, where it is tied up for a time and gradually tamed. Fourteen animals were caught in 1899-1900, the last year in which the mahals were sold by the Deputy Commissioner.

Other animals.

Rhinoceros live in the swamps that fringe the Brahmaputra and the Manas, and in the sparsely populated tracts in the north-west corner of the district, but they are now becoming very scarce. They breed slowly, and, as the horn is worth more than its weight in silver, and the flesh is prized as food, they present a tempting mark to the native hunter. Steps have recently been taken to preserve the game in a tract of jungle land, about 90 square miles in area, in the northern part of the Bijni mauza. Herds of wild buffalo are found in the same locality, and wild bulls often serve the tame cows that are kept by the Nepalese on the Brahmaputra *churs*. Bison are generally found near the hills and in the neighbourhood of tree forest; tigers, leopards, and bears are met with in almost every part of the district. Wild animals cause little loss of human life, but in 1903 are said to have accounted for nearly four thousand head of cattle. The number of human beings killed in that year by different animals was as follows:—Elephants 4, tigers 8, bears 2, wild buffaloes 3, wild pigs 2, snakes 29, total 48. Rewards were at the same time paid for the destruction of 86 tigers, 146 leopards, and 23 bears. Small game include wild geese and duck, snipe, florican (*sypheotis bengalensis*), black and marsh partridge, pheasants and hares. Peacocks are also occasionally seen in the north of the district.

CHAPTER II.

HISTORY.

Summary—Narak and legendary history—Visit of Hiuen Tsiang—Kamrup in the 11th century A. D.—The Koch Kings—Struggle between Muhammadans and Ahoms—Muhammadan invasions—The Ahom Kings—The Moamaria insurrection—Annexation of Assam by the British—Ahom government and social life—Buchanan Hamilton's description of Kamrup—Unhealthiness of Gauhati—The Bhutan war—Riots in 1893—Archæological remains—Chronological Table.

Summary. The district of Kamrup originally formed part of the kingdom of Kamarupa, which at one time is said to have included part of North-Eastern Bengal and the whole of the valley of the Brahmaputra. Narak's name is still remembered as one of the first protectors of Kamakhya, and his son Bhagadatta is said to have fought on the losing side in the great war of the Mahabharata For many centuries the history of the district is involved in great obscurity. It seems probable that the line of Narak was displaced by a Bodo chief, who was subsequently driven eastwards to the valley of the Dhansiri, but in the eleventh century A. D. it seems clear that Kamrup was included in the territories of a powerful and civilized line of Pala kings. In the sixteenth century Kamrup passed into the possession of the Koch kings. The power of this dynasty declined, however, as rapidly as it rose, and in the seventeenth

century the district was the scene of continual conflicts between the Muhammadans and the Ahoms. In the short space of fifty years Gauhati was taken and retaken no less than eight times, but towards the end of the seventeenth century Kamrup was definitely incorporated in the territory of the Ahom Rajas. From that time onward the district formed part of their kingdom in name, though not always in fact, till in 1826 it passed into the possession of the British by the treaty of Yandaboo.

The kingdom of Kamarupa, 1000 B. C.–1000 A. D.

According to the *Yogini Tantra*, the kingdom of Kamarupa extended from the Karatoya river on the western boundaries of Rangpur to the Dikrai in the east of the Darrang district. It was divided into four portions, *i. e.*, Kamapith from the Karatoya to the Sankosh, Ratnapith from the Sankosh to the Rupahi, Suvarnapith from the Rupahi to the Bhareli, and Saumarpith from the Bhareli to the Dikrai. The earliest king of Kamarupa of whom anything in particular is recorded is Narak, who is said to have been the son of the Earth by Vishnu, and who defeated and slew his predecessor Ghatak.* He established his capital at Pragjyotishpura, the modern Gauhati, and seems to have been a powerful and prosperous, though somewhat headstrong prince. He was appointed the guardian of Kamakhya, and his name still lives amongst the people as the builder of the causeway up the southern face of the hill Nilachal, on which the temple of Kamakhya

* An account of the early kings of Kamarupa will be found in the Koch Kings of Kamarupa by Mr. E. A. Gait, C. S., published in J. A. S. B. Vol. LXII, Part I, No. 4, 1893.

stands. His power and presumption were such that he asked Kamakhya to marry him, and the goddess consented, on the understanding that he would construct for her a temple, a road, and a tank in a single night. He was on the point of completing this task when Kamakhya made a cock crow before the usual hour, and the place about eight miles north of Gauhati,* at which Narak in his rage killed the cock, is still known as Kukurakata (the place where the cock was killed). He was succeeded by his son Bhagadatta, who is mentioned in the Mahabharata as fighting on the side of the Kauravas at the great battle of Kurukshetra, and we thus seem justified in assuming that fully a thousand years before Christ Kamrup formed part of a powerful kingdom ruled by a line of non-Aryan princes.

The copper plates of the eleventh century.

Further information with regard to the rulers of Kamarupa is given in certain copper plates, which on palæographical grounds have been assigned to the eleventh century A. D. † These plates are valuable evidence as to the state of the country at the time at which they were engraved, but their account of the genealogy of the reigning king must obviously be received with some degree of caution. The dynasty of Narak is said to have been displaced by Cala Stambha, a Mleccha or foreign conqueror, whose line ended in the person of Sri Harisa, and was succeeded by another family of foreign princes, the first of whom was Pralambha and

* A hill near Silghat is also called Kukurakata for the same cause.

† For a description of these plates see J. A. S. B., Vol. LXVI, pp. 113 and 285, and Vol. LXVII, part I, No. 1, p. 99.

the last Tyaga Singh. The dynasty of Narak was then restored in the person of Brahmapala. The invasion of the Mlecchas and their subsequent expulsion not improbably corresponds with the great irruption of the Bodos, who, according to their own traditions, were at one time ruling at Gauhati and were subsequently driven eastwards to Dimapur, but the whole of this period is involved in great obscurity.

The visit of Hiuen Tsiang, 640 A. D.

In 640 A. D Hiuen Tsiang visited Assam, and the record of his travels affords a momentary glimpse of the conditions of the country, a glimpse which is not unlike the view afforded by a flash of lightning on a dark and stormy night. The landscape, which has been shrouded in impenetrable gloom, is suddenly disclosed to view, and with equal rapidity is engulphed again in the blackest darkness; and nothing definite is known of the fortunes of Assam and its inhabitants either immediately before or after the visit of the great Chinese traveller. The country seems to have advanced some distance on the path of civilization. The soil was deep and fertile, the towns surrounded by moats, the people fierce in appearance but upright and studious. Hinduism was the national religion, and, though Buddhism was not prohibited, its milder tenets had comparatively few followers.

Kamrup in the eleventh century A.

The evidence afforded by the copper plates which have been discovered in Kamrup, Nowgong, and Darrang suggests that the Pala kings, who reigned over Kamarupa in the eleventh century A. D., were powerful princes, who, in all that makes for material comfort and well-being,

were far in advance of the Assamese of the present day. They were lords of Pragjyotisha, the modern Gauhati, but seem to have resided at Durjaya, which in all probability occupied the site on which the station of Tezpur now stands. Their capital is described by the author of the grant in the most glowing terms. It was crowded with soldiers and merchants, and adorned with learned men, priests, and poets. A thousand plastered turrets hid the sun, and the strength of its ramparts were a source of mortification, or, as the inscription quaintly puts it, "pulmonary consumption," to various other mighty chiefs. The king studded the earth with his white-washed temples and the pillar monuments of his victories He was evidently no mere local princeling, as he obtained great wealth from his copper mines; and there are no copper mines in the neighbourhood of Gauhati or Tezpur. Considerable allowance has to be made for the exuberance of the oriental imagination, but the precise injunctions issued to the "people of the Brahman and other castes, headed by the *district revenue officers and their clerks*," with regard to the actual grant of land, suggest a systematic and well organised government. Similar conclusions are to be drawn from the following description of the land itself and of its easements "Be it known to you, that this land, together with its houses, paddy fields, dry land, water, cattle pastures, refuse lands, etc., of whatever kind it may be, inclusive of any place within its borders, and freed from all nuisances on account of the fastening of elephants, the fastening of boats, the searching for thieves, the inflicting of punishments, the

tenants' taxes, the imposts of various causes, and the pasturing of animals, such as elephants, horses, camels, cattle, buffaloes, goats, and sheep, as set forth in this charter, is given to him for the sake of God and the glory of my father and myself."

The Pala kings.

Brahmapala, in whose person the line of Narak was restored, was succeeded by his son Ratnapala, whose sceptre devolved not on his son but on his grandson Indrapala. Of the subsequent fate of these Pala kings we know but little, but it is clear that in the eleventh century A. D. Lower and Central Assam formed part of a civilized and powerful kingdom, which had reached that stage of development in which attention can be paid to the arts and amenities of life. The huge tanks in the neighbourhood of Gauhati and the bricks and mortar found in every direction beneath the soil show that it must once have been a place of very great importance. To the south there are the remains of ramparts * nearly four miles distant from the river's bank, and it is obvious that such an extended line of fortifications could only have been held by a large army. The contrast between the glories of the old Gauhati and the dead level of mediocrity, which is the distinguishing feature of the district at the present day, is very marked.

The Koch kings. Viswa Singh, 1509–1554.

After the disappearance of the Palas, the next dynasty, of whom we have any certain record, is that of

* The date of the construction of these ramparts is uncertain, but it is on record that Arjun the Buragohain made a wall round Gauhati in 1667 A. D.

the Koches, and here we reach the region of history and not of mere tradition and hypothesis.*

The founder of the Koch kingdom was a Mech named Viswa Singh, who is said to have been the son of Hira, the wife of one Haria Mandal, by Siva, who assumed the shape of her husband, and thus induced her to admit him to her embraces. Viswa Singh subdued the petty princes who surrounded him, founded a magnificent city in Kuch Bihar, and reduced his state to order. The whole population was divided up into different corps under officers of increasing dignity, a thakuria being appointed over every 20 coolies, a saikia over every 100, a hazari over 1,000, an umra over 3,000 and a nawab over 66,000. He took a census of his subjects and found that the number capable of bearing arms was 5,225,000, a figure which suggests that an extra cypher must in some way have crept into the total reported to the king. He is said to have marched against the Ahoms, but to have abandoned the expedition owing to the collapse of his commissariat; but the Ahom version, which states that he was defeated and made tributary, seems a more probable explanation of the failure of the expedition. Another exploit credited to this prince is the re-discovery of Kamakhya. He visited the hill Nilachal, where he was shown a mound which was said to contain a deity. The prayers he offered were at once granted, and he accordingly had the mound explored, when the ruins of the old temple at once came to light. A new

* This account of the Koches has for the most part been taken from an interesting paper on the Koch kings of Kamarupa by Mr. E. A. Gait, C. S., published in J. A. S. B., Vol LXII. Part I, No. 4, 1893.

temple was then erected, a gold coin placed between each brick, and Brahmans brought from Kanouj and other places to perform the sacred rites.

Nar Narayan, 1534–1584 A. D.

Viswa Singh died after a reign of 25 years, and was succeeded in 1534 A. D. by his son Malla Deva, who assumed the name of Nar Narayan. The reign of this prince represents the zenith of the Koch power, and his armies, which were led by his brother Sukladwaj or Silarai, met with almost unvarying success. He first attacked the Ahoms, but, mindful of his father's failure, commenced his operations by building a great military road along the north bank of the Brahmaputra, and constructing tanks at regular intervals along it. The work was entrusted to his brother Gohain Kamala, and the road, much of which is still in existence, bears the name of Gohain Kamala Ali to the present day. Nar Narayan entered the Ahom capital Gargaon (the modern Nazira), and did not leave till he had received the submission of the Ahom king. The Kachari Raja and the Raja of Manipur were then reduced to the position of feudatory chiefs, and the kings of Jaintia, Tippera, and Sylhet conquered and slain. Further successes were obtained over the rulers of Khairam and Dimuria, but the tide of fortune turned when an attack was made on the kingdom of Gaur. The Koch army was routed and Silarai himself made prisoner. Nar Narayan would not, however, accept this defeat as final, and a few years later joined with the Emperor Akbar in a second attack upon the Pasha of Gaur. This enterprise was crowned with success, and Gaur was divided between the Emperor

of Delhi and the Koch king. Shortly before this expedition Nar Narayan had restored the famous temple at Kamakhya, which had been injured by the Muhammadan invader Kala Pahar in 1553 A.D.

eline of
oh king-
m. Raghu
i, 1581-7
3 A.D.

Within the space of two generations the Koch kingdom had attained to an extraordinary height of prosperity and power, but its decline and fall were as rapid as its rise. For a long time Nar Narayan had no male offspring, and Silarai's son, Raghu Rai, was regarded as his heir. When this boy was approaching manhood, one of his uncle's wives gave birth to a son called Lakshmi Narayan, and Raghu Rai, realising that he had now no hope of succeeding to the throne, withdrew from the capital to Barnagar in the Barpeta subdivision of Kamrup. Nar Narayan endeavoured to compel him to return, but his soldiers were defeated and the king weakly resolved to divide his kingdom.* The territory east of the Sankosh was made over to Raghu Rai, while Lakshmi Narayan received the part that lay west of that river. Raghu Rai continued to reside at Barnagar, and seems to have been much devoted to religious exercises. In 1583 A.D. he restored the temple of Hajo in Kamrup, which had been injured by Kala Pahar, and endowed it with grants of land.

arikshit,
8-1614
.D.

Raghu Rai was succeeded by his son Parikshit in 1593 A.D. This prince mounted cannon at Pandunath, to the

* According to Buchanan Hamilton, the kingdom was founded by Hajo, father of Hira and grandfather of Viswa Singh, and divided by Viswa Singh, who allotted the portion east of the Sankosh to Sukladwaj or Silarai, and that west of the river to Nar Narayan. On general grounds, however, this account seems to be less probable than that given in the body of the text.

west of the Kamakhya hill, and built a town at North Gauhati, whose fortifications can still be traced for many miles even at the present day. He then had the misfortune to provoke the cupidity of the Muhammadans, who determined to annex Koch Hajo, as Parikshit's dominions were called, as they had already succeeded in establishing their suzereignty over Lakshmi Narayan's kingdom of Kuch Bihar.* A strong force was sent up the valley under Mukarram Khan. Fort Dhubri was garrisoned by an army of 500 horse and 10,000 foot, but it was captured after a four weeks' siege; and a naval engagement, which took place in the Gangadhar river, was equally disastrous to the Koch king. Parikshit was driven across the Manas into Kamrup, and there surrendered to the enemy, but his brother Baldeo declined to abandon the unequal struggle and fled to the Ahoms for assistance.

Conflict between Ahoms and Muhammadans.

Of the military prowess of these people the Musalmans themselves bear ample testimony, and for a time, at any rate, Baldeo met with a considerable measure of success. The Assamese fleet defeated the Muhammadans in a naval engagement on the Brahmaputra, and Hajo was besieged and taken. Emboldened by these victories Baldeo and his army advanced to Jogighopa, but here they were defeated and were forced to retire, first upon Budhnagar, and then to a place called Chothri near the foot of the hills. A pitched battle took place at Bishenpur in which the Assamese were defeated with great loss, and the Muhammadans then marched upon the forts at Pandu

* An interesting account of the wars between the Muhammadans and Ahoms will be found in J. A. S. B., Vol. XLI, Part I, No. 1, 1872.

and Srighat on either side of the river near Gauhati. The Assamese fleet was defeated and dispersed, the forts taken, the post at Kajli near the confluence of the Kalang and the Brahmaputra captured, and by the beginning of 1638 A.D. the Ahoms had been driven out of Kamrup, and Gauhati had become the capital of the Moslem governor. But it was not for long that the Muhammadans remained in possession of their newly conquered territory. In 1658 Jaiyadwaj Singh took advantage of the disputes amongst the claimants to the throne of Shah Jehan, and marching down the valley of the Brahmaputra drove the Moslems and his former allies the Koches alike before him. An Ahom outpost was established at Hatsilah, and the Assamese annexed a portion of the Karaibari pargana in the Goalpara district.

Mir Jumla invades Assam in 1662 A. D.

The new subadar of Bengal was not, however, the man to brook this unprovoked aggression, for, though the Muhammadans had but little title to Kamrup, the Ahoms had still less, and in 1662 Mir Jumla led a powerful expedition to the conquest of the Assam Valley. The Ahoms had erected a strong fort at Jogighopa, defended by moats and holes which were thickly studded with bamboo spikes, but, on the approach of the Muhammadans, they fled without striking a blow. No resistance was offered in Kamrup. Gauhati, which at that time was situated on the north bank of the Brahmaputra, was occupied without the loss of a single man, and no attempt was made to hold the forts at Srighat, Pandu, and Kajli. A Muhammadan faujdar was left as governor of Gauhati, and the army proceeded on its way up the valley to the conquest

of Gargaon. The difficulties experienced during the march arose more from the nature of the country than from the obstinacy or enterprise of their opponents. The Ahoms continued to pursue their Parthian tactics; they seldom offered open resistance to the invading force, and when they did so met with no success, and on the 17th March 1662 the Nawab entered Gargaon.

The Muhammadans compelled to retreat by disease.

The history of the expedition is not unlike that of Napoleon's ill-fated irruption into the territories of the Czar, and rain and fever did for the Ahoms what frost and snow did for the Russian Emperor. When the rains broke the country was converted into one huge swamp and military operations were impossible. The invaders were shut up in their camp, and any stragglers who dared to venture out were promptly shot by Assamese who were lying in wait on every side. Sickness began to break out amongst the soldiers, and, though there was abundance of rice, all other provionsis were extremely scarce, salt being sold for as much as Rs. 30 per seer. With the commencement of the cold weather the Muhammadans were again enabled to resume offensive operations. But the health of the general was so bad, and the determination of his followers not to remain another rainy season in Assam so strong, that he found it expedient to accept the terms of peace offered by the Ahom king. At the beginning of 1663 the army began its retreat down the valley of the Brahmaputra, and after suffering considerable hardships finally reached Bengal. Mir Jumla himself did not survive the failure of his expedition, and died on the river a little distance above Dacca.

After stormy period Gauhati finally captured by Gadadhar Singh, circa 1685 A. D.

The unfortunate town, Gauhati, continued to be the sport of the contending powers. Four years after Mir Jumla's retreat it was re-taken by the Ahoms, but they only held it for five years, and in 1672 the Muhammadans found themselves able to re-occupy the town. From 1670 to 1679 was a most disastrous period in Ahom history. No less than seven princes succeeded to the throne, only to perish by poison or the knife of the assassin, and there was no central authority in the state strong enough to control the turbulent nobles or to repel invasion from without.

In 1681 Gadadhar Singh headed a rising against the prime minister, who had seized the reins of Government, murdered the puppet prince in whose name he ruled, and proceeded to set the state in order. He re-occupied Gauhati, and with its capture the last vestige of Muhammadan rule disappeared for ever from Kamrup. It most assuredly was time for the district to be allowed some rest. In the short space of fifty years Gauhati had been occupied by a hostile force no less than eight times, and this continual taking and re-taking of the town must have been fraught with the utmost misery for its inhabitants. From this time onward Kamrup became part of the Ahom territories, and was administered by a viceroy who was stationed at Gauhati. But before describing the growth of the Ahom power in Lower Assam, and the customs and institutions of that vigorous people, some reference must be made to the various inroads made by the Muhammadans upon the district prior to the final invasion of Mir Jumla in 1662.

Muhammadan invasions.

Bengal was conquered in 1203 A. D., and the victorious general Baktiar Khilji proceeded eastwards into Assam. The difficulties of the country proved to be insuperable, and he was compelled to retire without annexing any portion of the Brahmaputra Valley. He was followed by Ghiyas-ud-din Bahadur Shah, who is said to have advanced as far as Sadiya in 1220 A.D., but, though at first successful, he too was at last defeated and driven back to Gaur. Thirty-six years later Ikhtiyar-ud-din Yuzbak Tughril Khan invaded Kamrup and erected a mosque in commemoration of his victories, but his triumph was of very short duration. When the rains broke the Assamese returned and attacked the invaders, who were now weakened with disease. The general and most of his followers were killed, and only a few returned to Bengal to tell of the destruction of the army. He was followed by Muhammad Shah, who in 1337 A. D. "sent 100,000 horsemen well equipped to Assam, but the whole army perished in that land of witchcraft and no trace of it was left." *

This extract plainly reflects the feelings with which Assam was regarded by the Muhammadans. Time after time their armies, which had overrun Upper India and Bengal with so litte difficulty, were foiled by the heavy jungles and the moist unhealthy climate of the Brahmaputra Valley. Such continuous failure could only in their estimation be due to some more than natural cause.

To the conquest of Nilambor by Husain Shah it is hardly necessary to refer, as his capital Kamatapur is

* Alamgirnamah, p. 731.

situated in Kuch Bihar, and it is doubtful whether the Muhammadans on this occasion advanced into Kamrup.

In 1506, Turbuk marched up the valley as far as Kaliabar, and there gained a victory over the Ahom troops. He met with less success in his second invasion of Assam, and was defeated and killed in a bloody battle on the Bhareli in 1532. Twenty-one years later Kala Pahar, a Hindu apostate, made a marauding expedition into the valley, and attempted to demolish the temples at Kamakhya and Hajo A fanatical zeal for the propagation of his new religion seems, however, to have been his guiding motive, and no attempt was made to permanently annex new territory to the Mughal Empire. The various wars between the Muhammadans and the Koches and the Ahoms have already been described in detail.

he Ahoms. We must now retrace our steps to describe the origin of the Ahoms, the vigorous power who drove the Muhammadans from Kamrup, and from whose faltering hands the British received the sovereignty of Assam.

The Ahoms were a Shan tribe from the kingdom of Pong, in the upper valley of the Irawadi, who, at the beginning of the thirteenth century A. D., crossed the Patkai, and settled in the south of the territory which has since been formed into the districts of Sibsagar and Lakhimpur. The country at the foot of the hills was occupied by tribes of Morans and Borahis, whom they easily subdued, and who were soon absorbed by inter-marriage with their conquerors. The history of the gradual development of the

Ahom power, and of the manner in which they overthrew first the Chutiya kingdom at Sadiya, and afterwards the Kachari kingdom at Dimapur, will be found in the Gazetteer of the Sibsagar district, as this is a matter with which Kamrup had little or no concern. At the beginning of the seventeenth century the Ahom kings began to intervene in the affairs of Lower Assam, and their struggles with the Ahoms for the possession of Gauhati have already been described.

Rudra Sin 1695–1714 A. D.

Gadadhar Singh was the first king to definitely annex Kamrup to the Ahom territories, but the zenith of their power was reached in the reign of his successor Rudra Singh (1695—1714). This powerful prince waged successful wars against the Kachari Raja and the king of Jaintia, and his generals brought both of these chiefs captive to the Ahom Court. He founded a new capital at Rangpur in the Sibsagar district, reduced the whole of Assam proper to order, and finally died at Gauhati in the nineteenth year of his reign. The Rudeshwar temple, which stands on the north bank of the river opposite the town, was erected by his son in memory of this sad event.

Sib Singh. 1714–1744 A. D.

His son Sib Singh was a weak prince, much under the influence of his wives, whose name has come down to posterity as excavator of the great tank near which the present station of Sibsagar (Sib's tank) stands. Both he and his two successors were ardent Saktists, and erected numerous temples, and made liberal grants of land and *paiks*, for the maintenance of their special form of Hinduism.

amatta
igh,
4–1751.
Jeswar
igh,
1–1769.

The reign of his successor Pramatta Singh was uneventful, and, during the incumbency of the next prince Rajeswar Singh, the signs of the decay of the Ahom power became all too clear. The Raja of Manipur was driven from his home and applied to the Ahom king for aid. Orders were issued for the despatch of an expedition, but the nobles, to whom the command was entrusted, excused themselves on various grounds and declined the proferred honour. The army lost its way when endeavouring to cross the Patkai, a large number of men perished, and, though ultimately the Manipur Raja succeeded in regaining his dominions, it does not appear that the assistance of the Ahoms materially contributed towards his success.

kshmi
igh,
9–1780.
e Moama-
Insurrec-
n.

Lakshmi Singh's reign was signalized by the outbreak of the Moamaria insurrection. The causes of this insurrection are not quite clear. According to the chroniclers, a certain Hathidharia Chungi with one Nahor Kachari came to offer their annual tribute of elephants to the king. The elephant which they tendered to the Borbarua was a lean and sorry animal, and, as an expression of his disapproval, he cut off their hair and noses, flogged them, and drove them away. Boiling with indignation at this outrage, Nahor proceeded to the house of a Hari woman, whose daughter he espoused, and from whom he received a set of metal plates, covered with mystical incantations to confound the enemy. He then applied to the Moamaria gosain for help, which was readily afforded him, and the standard of revolt was raised. This is the account given by the Ahom chroni-

clers, and it differs to some extent from the story as told by the Moamaria gosain at the present day. According to this authority, the leaders of the rebellion were two Moamarias named Nahor Khora and Ragho Neogay, who, after they had been punished for failing to deliver the elephants required, went for assistance to their gosain. The gosain himself declined to listen to their proposals, but they succeeded in winning over his son Gagini Bardekha, who gave them a weapon consecrated with the magic plates of the Kalpataru. The Kalpataru was a sacred book which Anirudha is said to have obtained from Sankar Deb, though the Ahom chroniclers contemptuously assert that it was the property of a sweeper woman.

Success and subsequent defeat of Moamarias

From the very first the rebels carried all before them. The royal armies were defeated under circumstances which suggest that men and officers alike were guilty of gross incompetence and cowardice; and Lakshmi Singh was driven from his capital and captured. The insurgents then proceeded to appoint Ramakanta, the son of Nahor Khora, to be their Raja. Marauding parties harried the country on every side, and the misery of the common people was extreme. A report at last gained ground that orders had been issued for the execution of all the former officers of state, and this incited the adherents of the king to make one final effort. The signal for the attack is said to have been given by one of the wives of Lakshmi Singh. Ragho, who was one of the most influential men amongst the Moamarias, had forcibly taken her to wife, and, as he was bending down

at the *bihu* to offer his largess to a dancing boy, she cut him down with a sword. On the death of their leader, the rebel forces were surprised and scattered, and a pitiless vengeance taken that spared neither age nor sex.* The house of the Moamaria mahunt was surrounded, and almost the whole of his family was killed before his eyes, while all the officers appointed by the Moamarias were seized and beaten to death. The wives of the rebel prince were treated with savage cruelty. One of them was flogged to death, while two others had their ears and noses cut off and their eyes put out.

aurinath ingh, 780–1795.

Moamarias gain victorious.

In 1780, Lakshmi Singh died, and was succeeded by his son Gaurinath, in whose reign the Moamaria insurrection broke out anew, and with increased violence. At first, the king's troops met with some measure of success, and orders were issued outlawing the rebels and authorizing any person to kill any Moamaria he might meet, regardless of time, place, sex, or age. Such orders seem to have been only too well adapted to the temper of the people, and, according to the Ahom chronicler, "the villagers thereupon massacred the Moamarias with their wives and children without mercy." The rebels in their turn were not slow to make reprisals; they plundered the country on every side, and "the burning villages appeared like a wall of fire." The ordinary operations of agriculture were suspended, no harvests could be raised, and famine killed those whom the sword had spared. "The price of a katha of rice rose to one

* The Moamarias say that 700,000 members of their sect were killed, which is no doubt an exaggeration.

gold mohur, and men starved in crowds under the trees forsaking their wives and children." The highest Hindu castes are said to have eaten the flesh of cows, and dogs and jackals were devoured by the common people.

In 1786, the rebels under Bharat Singh inflicted a decisive defeat upon the royal troops, and took Rangpur, the capital, by storm. The king fled to Gauhati, and in his terror left even his wives behind him. His generals remained behind in Upper Assam and carried on the contest with varying success. Troops were despatched to their assistance from Manipur. but most of them were ambushed and cut up, and the survivors had no heart to carry on the struggle. The desolation of the country is thus described by the Ahom chronicler. "The Mataks harried the temples and the idols of the gods, and put to death all the sons and daughters of our people. For a great length of time our countrymen had no home, some took shelter in Bengal, some in Burma, some in the Dafla Hills, and others in the fort of the Buragohain who was fighting with the Mataks for years and months together." Bharat Singh ruled at Rangpur for upwards of six years and coins are extant which bear his name; but in 1792 a small British force was sent to the assistance of the Ahom king under the command of Captain Welsh. Gauhati, which had been captured by a mob of Doms under a Bairagi, was re-taken, Krishna Narayan, the rebellious Raja of Mangaldai, was subdued, and in March 1794 Rangpur was re-occupied after a decisive victory over the insurgents. Captain Welsh was then recalled, but the Ahom king was able to keep his

enemies in check by the help of sepoys trained on the English system.

Kamaleswar Singh, 1795–1809 A.D.

A few months after the departure of Captain Welsh, Gaurinath died and was succeeded by his son Kamaleswar Singh. The country was still in a state of great disorder. The Daflas, not content with harrying the villages on the north bank, crossed the Brahmaputra and attacked the royal troops near Silghat, but were repulsed with considerable loss. Even Europeans were not safe, and a Mr. Raush,* a merchant of Goalpara, who had extended his business operations to Darrang, was robbed and murdered by "naked Bengalis." These freebooters then occupied North Gauhati, but when they attempted to make good their position on the south bank, they were defeated with heavy loss by the royal troops near Pandughat. The Daflas again harried the Darrang district, and even enlisted Bengali sepoys in their service, but were ultimately conquered and dispersed. Victories were also obtained over the Moamarias and the Khamtis at the eastern end of the valley.

Kardatta's insurrection.

During the reign of this prince there was a local insurrection in Kamrup, which is commemorated in the songs of the villagers at the present day. The relations between the Ahoms and the natives of the district, or Dekheris as they were somewhat contemptuously called, were far from cordial, and the latter were not allowed to

* This Mr. Raush was the first European to interfere in the affairs of Assam. He sent 700 burkandazes to Gaurinath's assistance, but they were cut up to a man. A mass of masonry, the size of a small cottage, covers the remains of Mr. Raush's infant children at Goalpara.

remain within the fortifications of Gauhati after nightfall. One night a respectable Chaudri, named Hardatta Borua, was abused by the officer commanding the guard below the Nilachal hill. Indignant at this insult, Hardatta assembled his friends and followers and attacked Gauhati. The Ahom governor fled, and for a short time Hardatta occupied the town, but, on the approach of a strong Ahom force, he sought shelter in the jungle. He was soon captured and put to death, but his memory is still cherished by the people of Kamrup.

Final collapse of the Ahom kingdom.

In 1809, Kamaleswar Singh was succeeded by his brother Chandra Kanta Singh. The Bor Phukan or viceroy of Gauhati incurred the suspicion of the Buragohain or prime minister and fled to Calcutta and thence to Burma. At the beginning of 1816, a Burmese army crossed the Patkai and reinstated the Bor Phukan; but shortly after their withdrawal Chandra Kanta was deposed, and Purandar Singh appointed in his stead. The banished monarch appealed to the Burmese, who, in 1818, returned with a large force and replaced him on the throne.

They soon, however, made it clear that they intended to retain their hold upon Assam, and in 1820 Chandra Kanta fled to Goalpara, and from British territory began a series of abortive attempts to recover his lost kingdom. The Burmese were guilty of gross atrocities during their occupation of the country, the villages were plundered and burnt, and the people were compelled to seek shelter in the jungle. Women who fell into their hands were violated with every circumstance of

brutality, and the misery of the unfortunate Assamese was extreme. Fortunately for them, causes of quarrel had by this time arisen between the British and the Burmese. In 1824, war was declared by the British Government, and a force was sent up the valley of the Brahmaputra. The Burmese evacuated Gauhati without striking a blow, and such fighting as there was took place in the districts of Sibsagar and Nowgong. Rangpur was occupied in 1825, and in the following year, by the treaty of Yandaboo, Assam was ceded to the East India Company.

Ahom Administration. The paik system.

The above is but a brief account of the rise and fall of the Ahoms, but their history is more intimately connected with the Sibsagar district. It now remains to consider what is known of their social institutions, and the conditions under which those subject to them passed their lives.

The most striking feature in the economy of the Ahom state, and one which (to judge from their conduct since they came under our rule) must have been extremely repugnant to the people, was the system of enforced compulsory labour. The lower orders were divided up into groups of three or four called *gots*, each individual being styled a *powa paik*. Over every twenty *gots* was placed an officer called *bara*, over every five *baras* a *saikia*, and over every ten *saikias* a *hazarika*. In theory one *paik* from each *got* was always employed on duty with the state, and, while so engaged, was supported by the other members. The Raja and his

ministers had thus at their disposal a vast army of labourers to whom they paid no wages, and for whose maintenance they did not even have to make provision. It was this system which enabled the Ahom Rajas to construct the enormous tanks and great embankments, which remain to excite the envy of a generation, which has been compelled to import from other parts of India almost all the labour required for the development of the Province and its industries. Many of the works constructed were of undoubted utility, but many, on the other hand, were chiefly intended for the glorification of their designers. Few objects are more worthy of the attention of an enlightened government than the supply of wholesome drinking water to the people. But the huge reservoirs, constructed by the Ahom kings, were out of all proportion to the population which could by any possibility have made use of them, while the close proximity in which these enormous tanks are placed is ample evidence that practical utility was not the object of their construction. On the other hand, embankments which were thrown up along the sides of some of the rivers near the capital, protected land which has become unculturable since they have fallen into disrepair. The duty of providing the various articles required for the use of the king and the nobility was assigned to different groups, which were gradually beginning to assume the form of functional castes. The rapidity with which these groups abandoned their special occupations, as soon as the pressure of necessity was removed, is a clear indication of the reluctance with

which they must have undertaken the duties entrusted to them.*

War. But though the common people seem to have been compelled to supply an unnecessary amount of labour in times of peace, it was when war was declared that their sufferings were most pronounced. Certain clans of *paiks* were called out, and called out, it would seem, in numbers that were in excess of the actual requirements of the case; an error which entails the most disastrous consequences when the campaign is carried on in a country where supplies are scarce and communications difficult.

According to the Ahom chronicler, nearly 40,000 troops were despatched during the reign of Rajeswar Singh to reinstate the Manipuri Raja on the *gaddi*. Their guides, however, failed them; they lost their way in the Naga Hills, and about two-thirds of the soldiers perished, the mortality being chiefly due to famine and disease. The military dispositions even of Rudra Singh, one of their greatest princes, suggest a want of due deliberation in design, and a feebleness and lack of method in execution. In his expeditions against the Kachari and Jaintia Rajas, the Ahoms lost 3,243 persons, and the practical results obtained seem to have been insignificant. The descriptions of the campaigns against the Moa-

* The system of enforced labour was no doubt unpopular, but it had much to recommend it. It taxed the people in the one commodity of which they had enough and to spare, *i.e.*, labour. It also developed them on the industrial side, and the material comfort of the Assamese would possibly have been greater at the present day if they had not all of them been allowed to devote themselves exclusively to agriculture.

marias, given by the Ahom chroniclers, clearly show that the generals were often guilty of incompetence and cowardice, while the rank and file do not seem to have fully realized the dangers that beset a defeated army. Conditions such as these must of necessity have been disastrous to the private soldier.

Muhammadans describe Ahoms as brave soldiers.

The Muhammadan historians of the invasion of Mir Jumla give, however, a more favourable account of the Ahom military dispositions.* Their resources seem to have been considerable, and, in the course of the expedition, the Muhammadans captured 675 guns, one of which threw a ball three "mans" in weight, besides a large number of matchlocks and other field pieces. No less than 1,000 ships were taken, many of which could accommodate three or four score sailors; and in the naval engagement which took place above Silghat in March 1662 A.D., the Assamese are said to have brought seven or eight hundred ships into action. The Ahoms are described as strongly built, quarrelsome, bloodthirsty and courageous, but at the same time merciless, mean, and treacherous. They were more than equal to the Muhammadans in a foot encounter, but were much afraid of cavalry. This *corps d'élite* did not, however, exceed some 20,000 men, and the ordinary villagers, who were pressed into the service, were ready to fling away their arms and take to flight at the slightest provocation.

Uncertainty and arbitrary character of Government.

Another factor, which cannot but have re-acted unfavourably upon the common people, was the uncertainty

* An interesting account of this invasion will be found in the Journal of the Asiatic Society of Bengal, Volume XLI, Part I, pages 49—100.

of tenure, under which both the ministers and king held office. A perusal of the Ahom chronicles leaves the reader with the impression that the ministers were continually being deprived of their portfolios, and not unfrequently of life itself. Hardly less precarious was the position of the king, and in the short space of 33 years, between 1648 and 1681, no less than two monarchs were desposed, and seven came to a violent end. Good government, as we understand the term, must have been impossible under such conditions, and we may be sure that the people suffered from this constant change of rulers. Buchanan Hamilton, writing at the beginning of the nineteenth century, states that the administration of justice under Ahom rule was fairly liberal. Important trials were conducted in open court, the opinion of assessors was consulted, the evidence was recorded, and capital punishment was only inflicted under a written warrant from the king. It is true, no doubt, that few persons possessed the power of imposing the death sentence. But they were allowed to inflict punishments which the victim could hardly be expected to survive, and his position was not unlike that of the heretic delivered by the inquisition to the civil arm, with the request that "blood may not be shed."

Instances of this.

Abundant evidence is available in the Ahom chronicles to show the arbitrary way in which the royal authority was exercised. The following instances are quoted from the reign of Pratap Singh, 1611—1649 A. D. A Kataki, or envoy charged with diplomatic relations with foreign powers, asked the Muhammadan commander

on his frontier to supply him with two jars. His conduct was reported to the king, who immediately ordered him to be put to death. Another Kataki reported that he had heard from a down-country man that a Muhammadan force was advancing up the valley. The king enquired of the Kataki responsible for watching the movements of the enemy, whether this information was correct. This man declared that he was unable to obtain any confirmation of the rumour, whereupon the first Kataki was executed for presuming to meddle in matters with which he had no concern; a proceeding which seems to have been hardly calculated to ensure the supply of timely and accurate information. Three merchants then endeavoured to establish friendly relations between the Nawab of Dacca and the Ahom king. The latter prince took umbrage at such unwarrantable interference in affairs of state, and ordered the merchants to be put to death. It subsequently appeared that the facts had not been correctly represented, and the Bor Phukan and two other men responsible were promptly killed. A few years later, the king transported a large number of persons from the north to the south bank of the Brahmaputra, warning them that any one who attempted to re-visit his former home would suffer the penalty of death with all his family "even to the child in the womb." Five hundred men attempted to return, as they wished, the chronicler informs us, to rear a brood of silkworms. The king had them arrested, and 300 were put to death, the remainder escaping in the darkness of the night.

Savage punishments: an official blinded for not dismounting before his official superior.

The following incident that occurred in the reign of Lakshmi Singh (1769—1780) is typical of the uncertainties of the time. One Ramnath Bhorali Borua, an officer of state, had the presumption to appear mounted in the presence of his official superior the Borborua. A complaint was promptly laid before the king, who directed that both Ramnath and his brother should be deprived of sight. The injured man was not, however, destitute of friends, and came with his complaint to the Kalita Phukan, who had his private reasons for desiring the downfall of the Borborua. The Phukan went to the king, poisoned his mind against his minister with the suggestion that a conspiracy was on foot, a suggestion which in those days must always have seemed plausible enough, and, in a short time, the heads of the haughty Borborua, his two uncles and his brother were rolling in the dust. It is needless to multiply instances of the savage violence of the times, but the different forms of punishment in vogue call for some remark. Where life was spared, the ears, nose, and hair were cut off, the eyes put out, or the knee-pans torn from the legs, the last named penalty generally proving fatal. Persons sentenced to death were hung, impaled, hewn in pieces, crushed between two wooden cylinders like sugarcane in a mill, sawn asunder, burnt alive, fried in oil, or, if the element of indignity was desired, shorn of their hands and feet and placed in holes, which were then utilized as latrines.

In the seventeenth century, it was no uncommon thing

to compel conspirators to eat their own flesh, and more than one case is quoted, in which the father was forced to eat the liver of his son, a meal that was usually his last in this world. Punishment too was not restricted to the actual offender, but his wretched wife was liable to be handed over to the embraces of a Hari. Methods such as these could hardly fail to have a terrifying effect on much more hardened criminals than the Assamese.

Social life amongst the Ahoms.

The Ahoms, even after they became a powerful nation, seem to have adhered to a simple style of life, in which there was little of extravagance or luxury. They have left few masonry memorials of their rule; the Raja's palace is almost invariably referred to as "a planked house," and, according to Buchanan Hamilton, the king alone was allowed to erect an edifice of brick. Shoes might not be worn except by the special license of the king, bedsteads and curtains were only to be found in the houses of the rich, and all but the most important visitors to a noble's house sat on the bare ground. The account given of the Raja's palace at Gargaon by the historian of Mir Jumla's invasion is pitched in a more exalted key. Twelve thousand workmen had been engaged on its construction for a year, and the audience hall was 120 cubits long by 30 wide. "The ornaments and curiosities with which the whole woodwork of the house was filled defy all description: nowhere in the whole inhabited world would you find a house equal to it in strength, ornamentation, and pictures." The absence of all reference to these wonders in the Ahom histories suggests, however, that the Muhammadans were anxious

to magnify the power and majesty of the prince they had subdued.

The native chroniclers are naturally most concerned with the wars and religious festivals, which bulked so largely in the eyes of the historians of the day, and with the rise and fall of successive families of ministers. It is only incidentally that light is thrown on the social conditions of the people. The kings seem to have indulged in frequent tours about their territories, the itinerary usually followed being Rangpur, Sonarinagar, Tengabari, Dergaon, Jaliarang Bornagar, Bishnath, and Kaliabar. They were fond of fishing and shooting, and fully appreciated the excitement to be obtained from the hunting of wild elephants. On the occasion of coronations and royal weddings, a week was generally devoted to the festivities, which seem, however, to have consisted for the most part of prolonged feasts, accompanied by much unmelodious music. Towards the end of the eighteenth century, acrobats and jugglers were imported from Bengal, who amused their royal patrons with tricks which are still shown to the tourist on the P. & O. Kamaleswar Singh visited in state the two principal *sattras* of Auniati and Dakhinpat, and was entertained with all his retinue by the gosains. The chronicler quanitly tells us that the lunch at Dakhinpat gave greater satisfaction than the one at Auniati; but does not say whether this was due to the superior skill of the Dakhinpatia cook, or to the greater beauty of the *sattra* precincts.

The first Hindus to influence the Ahom kings were Saktists, and Pratap Singh (1611—1649) persecuted the Vaishnavites, one of whose leaders had converted his son to Hinduism. The disciples of the gosains were seized, human ordure was placed on their foreheads, and they were degraded to the sweeper caste To be found in the possession of religious books meant death, not only to the actual owner, but to every member of his family. Even Pratap Singh's spiritual pastors were not spared, and he denounced the new religion which, in spite of the adherence of the Raja, had not been able to save from death his own beloved son. He then assembled 700 Brahmans ostensibly to perform a festival, and, as a punishment for their incompetency, degraded them to the status of *paiks*. These persecutions were continued by Gadadhar Singh, who, in 1692, plundered the treasure houses of the Vaishnavite gosains, and cast the idols into the water. No respect was shown even to the sacred head of the Auniati *sattra*, and he was driven from his home to Tejikhat. He fared, however, better than the gosain of Dakhinpat, who had his eyes put out and his nose cut off, while many Hindu priests were put to death. A policy of extermination seems in fact to have been inaugurated, and, according to one chronicler, orders were issued for the destruction of every Hindu child regardless of sex and age. The king had large quantities of pork, beef, and fowls cooked by men of the Dom caste, and compelled Kewats, Koches, Doms, and Haris to partake of their unholy food.

Attitude of Ahoms towards Hinduism. Savage persecution of Vaishnavism.

This policy of oppression was reversed during the

reign of Rudra Singh, his son, who was publicly admitted as a disciple of the Auniati gosain; and, from this time forward, the influence of the priests seems to have increased.

Laxity of Ahom Hinduism.

But, though converted to Hinduism, the Ahoms found the restrictions of their new religion irksome; and their gosains, with the tact which they display towards their converts of the present day, allowed their new disciples a considerable degree of latitude. Rudra Singh, though he had been publicly admitted to the church by the Auniati gosain, feasted his followers on buffaloes and pigs on the occasion of his father's funeral; while not only buffaloes but even cows found a place in the menu of his coronation banquet. At the time of the first Moamaria insurrection, the rebel chief made overtures to Lakshmi Singh, and offered him, apparently in good faith, a pig for supper. A present such as this clearly shows that even towards the end of the eighteenth century the Hinduism of the Ahom kings was one of the most liberal variants of that catholic creed. Before taking any decisive step, it was the practice to refer, not only to the Brahmans and Ganaks, but also to the old Ahom priests the Deodhais and Bailongs. These venerable men were required to consult the omens, by studying the way in which a dying fowl crossed its legs; a system of divination which is in vogue amongst many of the hill tribes of Assam to the present day. The restrictions of caste were evidently somewhat lax, as we hear that the Moamaria mahunt had an intrigue with a Hari woman; while at the beginning of the nineteenth century

the viceroy of Gauhati took a fisher girl for his mistress, a breach of the *convenances* for which, it should be added, he was deposed.

The position of women

The influence of the Muhammadans in Assam Proper was so slight that the low view they professed to take of the other sex had little or no effect upon the general population. The Ahoms, like their Burmese ancestors, held their woman folk in honour, and, even at the present day, the purdah and all that it implies is almost unknown in the country inhabited by the Assamese. The Ahom princesses seem to have taken a prominent part on ceremonial occasions, and not unfrequently exercised considerable influence on affairs of state. In the middle of the 17th century, two of the queens almost usurped the reins of government, and, according to the Ahom chronicler, "their words were law." When called to account by the successor of their husband, they proudly stated that they had been of great service to the king, at a time when he was ignorant of the way in which he should behave, whether when "eating, drinking, sitting, sleeping, or at council." Sib Singh (1714—1744) is said to have abdicated in favour of his queens, hoping thereby to defeat a prophecy which declared that he would be deposed; and coins have been found bearing the names of four of these princesses. The mother of Lakshmi Singh dug a tank, and Gaurinath entrusted to his stepmother the control of the Khangia mel, and consulted with his mother about affairs of state. It was not, however, only the princesses of royal blood who concerned themselves with public matters. At the

time of the Moamaria insurrection, one Luki Rani was sent against the rebels; and the victory over Turbuk in 1532 is partly ascribed to the courageous action of the widow of the Buragohain, who had been killed in a previous engagement by the Muhammadans. Desperate at the loss of her husband, she put on armour and rode into the ranks of the enemy to avenge his death. No mercy was shown her and she fell, pierced with spears; but her example emboldened the Ahoms, who at once advanced to the attack and defeated the Musalmans with great slaughter.

Condition of Province at time of cession to the British.

In estimating the effects of British rule it is necessary to form a clear idea of the state of the Province at the time when it passed into our possession, and first it must be pointed out that the British did not conquer Assam in the sense in which that word is usually employed. The native system of government had completely broken down, the valley was in the hands of cruel and barbarous foreigners, and it was not as conquerors, but as protectors and avengers that the English came. They were certainly not inspired by any lust for land. For some time after the explusion of the Burmese, the East India Company were doubtful whether they would retain their latest acquisition, and an attempt was made to administer the upper portion of the valley through a descendant of the Ahom kings.

The condition in which we found the country was lamentable in the extreme. For fully fifty years, the Province had been given over to desolation and anarchy.

Life, property, honour were no longer safe, and the people in their misery had even abandoned the cultivation of the soil, on which they depended for their very livelihood. Bands of pirates used to raid up the valleys of the Dhansiri and Kakadanga, and return with their boats laden with booty, leaving ruin, death, and desolation in their wake. The hill tribes were no longer kept in order, and the Daflas descended and harried the submontane tracts, and even extended their depredations to the south of the Brahmaputra. The treatment meted out to the unfortunate villagers can be judged from the protest made by the hillmen to Rajeswar Singh, shortly before the collapse of the Ahom government, when they begged him "not to pull out the bones from the mouth of dogs." Buchanan Hamilton, writing in 1808 A. D., states that north of the Brahmaputra "there is no form of justice. Each power sends a force, which takes as much as possible from the cultivator."

Native testimony on this point.

The memories of this miserable time survived long after it had passed away. In 1853, an Assamese gentleman, Srijut Ananda Ram Dhekial Phukan, wrote as follows to Mr. Moffatt Mills:—"Our countrymen hailed the day on which British supremacy was proclaimed in the Province of Assam, and entertained sanguine expectations of peace and happiness from the rule of Britain. For several years antecedent to the annexation, the Province groaned under the oppression and lawless tyranny of the Burmese, whose barbarous and inhuman policy depopulated the country, and destroyed more than one half of the population, which had

already been thinned by intestine commotions and repeated civil wars. We cannot but acknowledge, with feelings of gratitude, that the expectations which the Assamese had formed of the happy and beneficial results of the Government of England, have, in a great measure, been fulfilled; and the people of Assam have now acquired a degree of confidence in the safety of their lives and property, which they never had the happiness of feeling for ages past."

Whatever errors have been committed by the British Government, and it is too much to hope that no mistakes of policy have been made during an administration of nearly eighty years, there can be no question that the introduction of a settled form of government has been of the greatest benefit to the immense mass of the people to whom it has been extended.

Buchanan Hamilton's account of Kamrup.

Buchanan Hamilton, who compiled a memoir on Assam in 1808 A. D., pointed out that the viceroy at Gauhati was not only the ruler of an extensive district, but was in charge of the relations between Assam and Bengal, and was thus placed in a position of exceptional responsibility and power. On the southern frontier of Kamrup there were various minor chiefs, whose position was not unlike that enjoyed by the siems in the Khasi Hills at the present day. They exercised judicial powers in petty cases, and were bound to supply the Ahoms with *paiks*, or money in their place, and to attend with a contingent in times of war. The headquarters of these chiefs, many of whom were of Garo birth, were situated at Barduar, Bholagram, Mairapur, Lukhiduar,

Pantan, Bongram, Vagaduar, Beltala, Dumoriya, and Rani. Gauhati, which is described as being a very poor place, was garrisoned by some five or six hundred men, about one hundred of whom were natives of Western India.

Gauhati headquarters of Assam; its unhealthiness.

For many years after our occupation of Assam Gauhati remained the headquarters of the Province, but it enjoyed a very evil reputation for unhealthiness. Mr. Cosh, writing in 1837, said that, to judge from the reports of the natives themselves, it was the most unhealthy station in Assam, and that the records of the hospital exhibited a rate of mortality surpassed by few stations in India. Few positions, in fact, could have been worse chosen in so far as health was likely to be concerned.*

Colonel Hopkinson, the Commissioner, brought a powerful indictment against the district when advocating the transfer of his headquarters to Shillong.† Mr. David Scott, the first Agent to the Governor-General on the North-East Frontier, declined, he said, to sleep on shore at Gauhati, though his indifference to exposure and fatigue were well known. Mr. Robertson, the next Commissioner, and his successor, Mr. Cracroft, avoided the town most sedulously, and it was only towards the end of his service that the next Commissioner, General Jenkins, spent any considerable portion of his time in this unfavoured spot. Colonel Hopkinson's denunciations of the town find strong confirmation in the crowded cemetery.

*Topography of Assam, p. 88.

†Letter No. 338, dated 28th September 1866, to the Board of Revenue.

The European population of the place must have been very small, but death was only too busy in their ranks. There is hardly a year which is not commemorated by its tombstone, and in many years there were three or four deaths amongst this small community. On the erection of Assam into a separate Province under a Chief Commissioner the headquarters of the new Administration were located at Shillong, but since that date sanitary improvements have done much to improve the public health, and Gauhati is no longer the unhealthy place it was.

The Bhutan war of 1864. Occupation of Dewangiri.

No disturbances occurred in Kamrup in connection with the Mutinies of 1857. The next historical event with which the district is connected is the Bhutan war of 1864, which was the natural sequel to the indignities offered to the envoy, who had been sent to adjust the differences outstanding between that country and the Government of India. At the time when we entered upon the administration of the district we found the Bhutias in possession of the country lying at the foot of the Bhutan Hills, *i.e.*, the duars of Bijni, Chappakamar, Chappaguri, Banska, and Ghaukalla. The Bhutias were allowed by us to remain in occupation till 1841; but in that year the duars of Kamrup and Mangaldai were annexed by the Company, and an annual payment of Rs. 10,000 was offered as compensation to the Bhutan State. On the outbreak of war it was decided that operations should be undertaken against the whole length of the Bhutan frontier. In December 1864, a column, under the command of Colonel Campbell, marched northwards

from Gauhati to attack the Bhutia post at Dewangiri.* The main body advanced with considerable circumspection, and, while they were still reconnoitring the pass, news arrived that Dewangiri had been captured by Captain Macdonald with fifty native policemen. The resistance offered had not been of a very serious character, and the British loss consisted of one policeman killed and five wounded. A garrison of six companies of native infantry and two mountain howitzers of the Eurasian battery was quartered in the village, and it was thought that they would have no difficulty in repelling any attack that might be made upon them.

Dewangiri abandoned and re-taken.

The Bhutias had, however, returned in considerable force. About 5 A. M. on January 30th the camp was suddenly rushed, and, though the enemy were driven off with some loss, they continued to assume an exceedingly aggressive attitude. Our loss on this occasion was one British officer killed and one wounded, and four sepoys killed and thirty-one wounded. Four days later the Bhutias threw up a stockade within five hundred yards of the camp, and managed to cut off the principal source of water-supply. They also succeeded in occupying the mouth of the Darranga pass, and on February 4th Colonel Campbell decided to evacuate the post, and to make his way by another route to the plains. A retreat by night through mountainous and jungly country is not an easy operation to perform, and a certain want

*The information contained in the following paragraphs has been taken from "Bhootan and the Story of the Dooar War," by Surgeon Rennie. London, John Murray, 1866.

of steadiness was shown on this occasion. Some of the wounded were left behind, the guns were abandoned, and subsequently fell into the possession of the Bhutias, and officers and men lost everything which they possessed. The enemy did not attempt to pursue the retreating troops, but it was of course impossible to acquiesce in this reverse. A strong force was collected at Kumrakatta, and at the beginning of April the position was re-taken without difficulty. Not a single soldier was killed on the British side, but the Bhutias lost over one hundred men, as the native troops, on forcing their way into the stockade, seem to have got out of hand, and to have gone to unnecessary lengths in breaking down the resistance offered to them. With the re-capture of Dewangiri active operations ceased on the Kamrup frontier, and since that date the village has continued to form part of British territory.

Subsequent history.

The subsequent history of the district has been uneventful. During the last twenty years of the nineteenth century, public health was extremely bad, and thousands of persons died of the curious contagious fever known as *kala azar*, which is described in the section on the medical aspects of the district.

The re-assessment of 1893.

In 1893 the land revenue assessment, which had remained unchanged for a quarter of a century, was enhanced, and the villagers in certain portions of the district combined to refuse payment. On December 24th, 1893, a mob of about 200 men looted the Rangia market, and, though the District Superintendent of Police was deputed to the

place, the attitude of the people was so threatening that he was unable to arrest the persons who were responsible for the outrage. The Deputy Commissioner accordingly proceeded to Rangia, and succeeded in securing the ringleaders. A large crowd soon assembled and threatened to sack the thana, and were only dispersed by the sepoys and armed civil police that formed his escort. Affairs then quieted down in this portion of the district, but on January 21st the villagers assaulted a mauzadar and mandal at Kapla in Sarukhetri mauza, and beat the latter so savagely that he died a few days afterwards The Subdivisional Officer happened to be in camp close by, and succeeded in arresting many of the rioters. But, as the mob were evidently prepared to rescue them by force, he was compelled to let them go, and when night came he fell back upon Barpeta. The Deputy Commissioner proceeded to his assistance without delay, arrested 59 of the rioters, and, when the mob threatened to rush his camp, dispersed them with his escort, which consisted of 15 sepoys and 15 armed police. The disturbances then quieted down, and the revenue of the district was collected without difficulty. The earthquake of 1897 is the only incident of grave importance which has occurred of recent years, and the effects of that terrible cataclysm of nature have already been described.

Archæological remains

In addition to the numerous temples, to which reference is made in the ensuing chapter, there are several remains of interest to the antiquarian in Kamrup. Barnagar, which was formerly the capital of the Koch kings Bali Narayan and Parikshit, is situated about eight miles north

of Barpeta. The site is now covered with dense tree forest, but fruit trees, tanks, and the signs of human habitation can still be seen. Another memorial of the Koch dynasty is the Gohain Kamala Ali, the great road which was constructed by Nar Narayan through North Kamrup and Mangaldai Near Betna, in the Rangia tahsil, is the Baidargarh, which is a square enclosure, or fort, surrounded by embankments, each of which is some four miles in length. It is said, but very little weight can be attached to the tradition, to have been the capital of King Arimatta.* A similar but smaller fortification, about ten miles further on in the Kharija Belbari mauza, is known as the Phenguagarh. Prior to the earthquake of 1897 there was a very interesting stone bridge in Sila Sindurighopa mauza, about three miles from the Kamalpur rest house. It was 146 feet long, with 22 water ways, and the foot way was formed of solid blocks of stone supported on stone piers. Local tradition has it that it was built by Baktiar Khilji or Mir Jumla, *i e.*, by the first or by one of the last of the Muhammadan invaders of Kamrup, but Dr. Bloch is of opinion that it was the work of a Hindu architect. The bridge is now completely wrecked, but it lasted longer than the river it was built to cross, and at the present day there is no stream within three miles of it.

At Gauhati there are some fine carvings on the northern face of the rocks by the Brahmaputra below the Sukleswar temple. The principal image is that of Vishnu, and is sup-

* The villagers in the neighbourhood know very little about the fort. Some ascribe it to Bikramaditya, others talk vaguely of a raja and a princess with whom he had eloped, a reminiscence of the rape of Rukmini by Krishna.

ported on the right by Surjya and Gonesh, and on the left by Durga and another figure too mutilated to admit of its identification. The town itself bears all the signs of having originally been a place of much importance. The large tanks, and the remains of brick buildings which are found in every direction beneath the soil, suggest that it must have been a wealthy and a populous city, and on either side of the river there are earthworks linking up the gaps between the encircling hills which enclose a very considerable tract of land.

CHRONOLOGICAL TABLE.

AHOM KINGS.

A. D.	
1228	Sukapha.
1268	Sutenpha.
1281	Subinpha.
1293	Sukangpha,
1332	Sukampha
1364	Sutupha—treacherously killed by Chutiyas at a regatta held on the Safrai river to celebrate a cessation of hostilities between the two tribes.
1376-1380	Interregnum.
1380	Sukemthi, a weak and tyrannical prince, assassinated by his ministers.
1389-1398	Interregnum.
1398	Sudangpha.
1407	Siyangpha.
1422	Suphukpha.
1439	Susingpha—defeats Nagas.
1488	Suhangpha-defeated by Kacharis in 1490, and murdered by a convict.
1493	Supimpha, a cruel prince, assassinated by his ministers.
1497	Suhunmung, alias Sarga Narayan or Dihingia Raja. Conquers Chutiyas and annexes their kingdom 1523. Repulses two Muhammadan invasions, the second being that under Turbuk in 1532, who was routed near the Bhareli rivers. Kills Kachari king and sacks Dimapur, his capital, in 1536. Assassinated 1539.
1539	Sukhenmung—built Gargaon (Nazira).
1552	Sukampha,
1611	Suchengpha or Pratap Singh. Assists Bali Narayan against Musalmans, besieges Hajo, but is driven back. Bar Nadi accepted as frontier between Muhammadans and Ahoms in 1637.
1649	Surumpha. Deposed.
1652	Suchingpha. Deposed.

MUHAMMADAN INVASIONS.

A. D.	
1204	Baktiar Khilji invades Assam.
1220	Ghiyasud-din Bahadur Shah advances to Sadiya, but is defeated.
1256	Iktiyarud-din Yuzbak Tughril Khan invades the Brahmaputra Valley, but is ultimately defeated.
1337	Muhammed Shah sends a force "of 100,000 horsemen" into Assam, al of whom perish.

KOCH KINGS.

1509-1534	Viswa Singh—Founds Koch kingdom; advances against Ahoms, but was apparently defeated.
1534-1584	Nar Narayan—Conquers Ahoms and occupies Gargaon circa 1563 A. D. Subdues Raja of Cachar, Jaintia, Manipur, Tippera and Sylhet. Kala Pahar, invades Assam in 1553 and destroys temples at Kamakhya and Hajo.
1581-1593	Raghu Rai obtains share of Koch kingdom east of Sankosh.

CHRONOLOGICAL TABLE.—*Continued.*

AHOM KINGS.

A. D.	
1654	Sutumla or Jaiyadwaj Singh. Ahoms occupy Goalpara 1658. Driven back by Mir Jumla, who enters Gargaon, 1661.
1663	Chakradwaj. Ahoms reoccupy Gauhati in 1667.
1670	Adayaditya Singh—Assassinated.
1672	Suklumpha-poisoned. Musalmans reoccupy Gauhati.
1674	Suhung—Assassinated.
1674	Teenkungiya—Assassinated.
1674	Suhungpha—Blinded and murdered.
1677	Sudinpha—Assassinated.
1679	Sulekpha (Lora Raja)—Assassinated.
1681	Gadadhar Singh—Ahoms recover possession of Gauhati.
1695	Rudra Singh—Founds Rangpur, defeats Kachari and Jaintia Rajas, publicly adopts Hinduism as his religion. This period represents the height of the Ahom power. Dies at Gauhati.
1714	Sib Singh—a weak prince, who resigned in favour of his wives. Excavated tank at Sibsagar.
1744	Pramatta Singh.
1751	Rajeswar Singh. Decline of Ahom power.
1769	Lakshmi Singh. Outbreak of Moamaria rebellion—king deposed for a time, but subsequently reinstated.
1780	Gaurinath singh. Driven to Gauhati by Moamarias. Reinstated by Captain Welsh in 1792, who is, however, recalled in 1794. Krishna Narayan Jarrang Raja asserts his independence in 1792, but is defeated by Captain Welsh.
1795	Kamaleswar Singh. Deposes Krishna Narayan.
1809	Chandra Kanta Singh—Burmese are invited into Assam by Bor Phukan. Deposed 1816.
1816	Purandar Singh—Burmese again enter Assam. Deposed 1818.

KOOCH KINGS.

A. D.	
1593-1614	Parikshit—Builds North Gauhati, quarrels with his cousin Lakshmi Narayan, calls in Muhammadans to his aid.
1614-1637	Bali Narayan—Invokes aid of Ahoms against Muhammadans. From this date the Kooch kings cease be of any political importance.

CHRONOLOGICAL TABLE.—*Concluded.*

AHOM KINGS.

A. D.	
1818	Chandra Kanta Singh—Burmese decline to leave. Chandra Kanta driven from Assam in 1820.
1824	War declared between British and Burmese Governments.
1825	Rangpur taken.
1826	Treaty of Yandaboo, by which Assam was ceded to the East India Company.

CHAPTER III.

THE PEOPLE.

Area and density—Variations in population—Migration—Sex—Marriage—Infirmities—Language—Castes—Religion—Temples—The Mahapurushias—Sattras—Muhammadanism—Animism—Buddhists—Christianity—Occupations—Marriage customs—Amusements and festivals.

Kamrup covers an area of 3,858 square miles and supports a denser population (153 to the square mile) than any other district in the Assam Valley. To the south the plain is much broken up by the outlying spurs of the Khasi Hills, and on this side of the Brahmaputra the population, except in the Palasbari tahsil, is comparatively sparse. In Boko, in the south-west corner, there were in 1901 only 71 persons to the square mile over a total area of 432 square miles, and in Chaygaon tahsil, lying east of Boko, there were only 104. North of the river, in the Gauhati subdivision, things are somewhat different. The central portion of the plain, which consists of the Hajo, Patidarang, Rangia, Nalbari, and Barama tahsils, is fairly densely peopled. Taken altogether these tahsils cover an area of 840 square miles, and in none of them was the density less than 300 to the square mile in 1901, while in Nalbari it was as much as 613, a figure which must be considered distinctly high for a purely rural tract. The highest point was reached in the Khata and Upar Barbhag mauzas, where, in 1901, there was a density

Area and density.

of about 840 to the square mile. North of the Gohain Kamala Ali, population again falls off, as Hindus have a prejudice against settling on the further side of that road. It is said that the Koch king Nar Narayan (1534—1584 A.D.) declared that this should be the boundary between the Hindu territory and the country in which animistic rites might still be practised, and it is a fact that, not only in Kamrup, but in Mangaldai on the east and Goalpara on the west, the country at the foot of the Bhutan Hills has been almost entirely given up to the Bodo tribe. In the Tamulpur tahsil and the Bijni mauza, which covered an area of 707 square miles and occupied respectively the north-east and north-west corners of the district, there were only 57 persons to the square mile. Except in the Bajali tahsil the whole of the Barpeta subdivision is very sparsely peopled. Taken as a whole there were 91 persons to the square mile, and in Bagribari near the Brahmaputra the density sank as low as 8. The population and density of each tahsil or mauza in 1901 will be found in Table III.

Towns and villages.

Kamrup contains two towns, Gauhati and Barpeta, and 1,716 villages. The villages are not, however, well defined units, clusters of huts which stand out clearly in the centre of the fields tilled by their inhabitants. Rice, the staple crop, is grown in wide plains, dotted over with clumps of bamboos and fruit trees in which are buried the houses of the cultivators. It is groves and not villages, that the traveller sees when riding through the more densely populated portions of the district, and not a house can usually be discerned till he has penetrated

this jungle of plantains, betelnut trees, and bamboos. There is generally no dearth of building sites, there are no communal lands, and there is nothing to keep the population together. Except in the Kachari duars, where the hamlets stand out more clearly on the grassy plains, it is difficult to tell where one village ends and another begins, or to which of the larger clumps of trees should be assigned the smaller clumps which are freely dotted about amongst the rice fields. The result is that the statistics of villages are of little practical importance; but, taking them for what they are worth, it appears that villages in Kamrup run small, as more than half the rural population in 1901 were living in hamlets with less than 500 inhabitants.

Growth of population early estimates.

The first recorded estimate of the population was that furnished by Captain Bogle in 1835 * The statistics were collected by the chaudris, who had never before troubled themselves about acquiring knowledge of this nature, and were said to be seldom men of business or detail. The Collector observed that the population was undoubtedly much underrated, an uncivilized people having at all times an aversion to record the number of their families. The total returned was 243,317 souls, and it is evident that this estimate, and one quoted by Mr. Robinson in 1841 (271,944), † were much below the mark. Seven years later the population was reported to be 387,775. ‡ The centre of the district was said to be densely peopled, but

* *Vide* his letter No. 16, dated 28th July 1835, to the Commissioner of Assam.

† A descriptive account of Assam, p. 282

‡ Report on Assam (Kamrup) by J. Moffatt Mills. Calcutta, 1854.

the fact that during the five years preceding Mr. Mills' visit there had been hardly any increase in the cultivated area and the land revenue demand suggests that the population had not been growing very rapidly. Cholera had for two years been ravaging the district; whole villages, according to the magistrate, had been depopulated, and in 1851 and 1852 upwards of 1,500 deaths occurred in Gauhati town alone.

Decrease of population between 1881 and 1901.

The statement in the margin shows the population recorded in 1872, and at each successive census. The census of 1872 was not a synchronous one; it is generally supposed to have been incomplete, and the large increase that occurred during the next nine years was, in all probability, partly due to the superior accuracy of the enumeration of 1881. At the same time there can be little doubt that there was a substantial growth of the population during this period. The decrease that was disclosed in 1891 was largely due to the mortality from *kala azar* which entered the district in 1888. The nature and history of this disease is discussed in the medical section, and we are now only concerned with its effect upon the development of the population. *Kala azar* was most virulent in the country lying south of the Brahmaputra, and in this tract the population declined by nearly 12 per cent. North of the river the population increased by about 2 per cent. During the last intercensal period the mortality from fever and *kala azar* continued to be high, especially in 1892, 1896, and 1897, and there were bad

	Population.	Percentage variation
1872	561,681	
1881	644,960	+14·8
1891	634,249	− 1·6
1901	589,167	− 7·1

outbreaks of cholera and smallpox. The result of all this sickness was that the census of 1901 disclosed a serious decrease in the population. The great earthquake affected cultivation by blocking the water channels and covering certain tracts with deposits of sand, and thus compelled a considerable number of persons to leave the district and seek a livelihood elsewhere. After allowing for this increase in emigration, it appeared that the number of persons born in the district and censused in the Province decreased by nearly 6 per cent. The injury done by the earthquake was especially pronounced in the Barpeta subdivision, and the gross decrease in this portion of Kamrup was no less than 14·5 per cent. In the sadr subdivision it was 5 per cent. The tracts which suffered most severely were the Hajo and Palasbari tahsils, which lie north and south of the Brahmaputra, a little to the west of Gauhati. In Hajo the decrease was as much as 18 per cent, but many of the people seem to have left their ruined rice fields and to have settled in the Rangia and Barama tahsils further north, and here the census actually disclosed an increase of the population. In Barpeta the mauzas near the river lost most heavily. In Bagribari there was a decrease of 77 and in Sarukhetri of 61 per cent, and the Bajali tahsil was the only place that showed an increase. It is satisfactory to know that the tide at last has turned, and that there has been an excess of births over deaths between 1899 and 1904.

The proportion of immigrants is lower in Kamrup than in any other district in the Plains of Assam, and in 1901 Immigration.

foreigners formed less than 3 per cent of the total population. The total number was 14,152, of whom 8,139 came from Bengal, the districts most strongly represented being Ranchi, the Sonthal Parganas, Saran, and Dacca. The tea industry is not of much importance in Kamrup, the gardens are largely worked with local labour, and barely one-fourth of these Bengalis were censused on the plantations. Other immigrants were Nepalese (1,559), who have settled down as graziers and in some cases as cultivators, the kaiyas or merchants from Rajputana (997), who are found in large numbers in Gauhati, and Bhutias, most of whom are temporary visitors who come down to trade in the cold weather, though there is one Bhutia village at Dewangiri which contains some seventeen houses. There are also a considerable number of natives of the United Provinces of Agra and Oudh (1,579), who are employed as carters, artizans, and coolies. A large proportion of these up-country men were censused in Gauhati town. Kamrup loses heavily by inter-district migration, and in 1901 only received 5,203 persons in place of the 25,835 born in Kamrup and censused in other parts of the Province. About 9,000 of these persons were found on the tea gardens of the four upper districts, and nearly 5,000 were censused in Goalpara. In the last named district the proportion between the sexes of the emigrants from Kamrup was fairly equal, so that in all probability they were ordinary cultivators who had moved across the boundary of the district, and were hardly emigrants in the sense in which that term is generally understood.

Sex.

The figures in the margin show that the proportion of women has increased at each successive census, and that in 1901 they actually exceeded the men in numbers.

Number of women to 1,000 men.	
1872	919
1881	900
1891	976
1901 ...	1,011

This, however, was solely due to the fact that the men when they go to Upper Assam generally leave their womenkind at home. Amongst those born in Kamrup and censused in the Province there were only 981 women to every thousand men as compared with 966 in 1891. Amongst the Hindus the proportion of the sexes was practically equal; amongst the Muhammadans the men were in a majority of 4 per cent; but amongst the animistic tribes there was a large surplus of women, due to the movement of the Kacharis to the tea plantations. The increase in the proportion of women has been ascribed to the greater resistant capacity of the so-called weaker sex in seasons of special unhealthiness, such as that from which the district has recently been suffering.

Marriage.

Infant marriage is unfortunately more prevalent than in most of the districts of Assam Proper. The statement in the margin shows the percentage of Hindu girls who have performed the marriage ceremony (*a*) under 10, and (*b*) between 10 and 15, in Goalpara, Kamrup, and Nowgong. In Goalpara as in Bengal "the healthy sense which bids the warrior races keep their girls at

Percentage of Hindu girls married and widowed in ages	0–10	10–15
Goalpara	4·8	62·4
Kamrup	1·5	23·9
Nowgong	0·2	10·5

home until they are fit to bear the burden of maternity seems to have been cast out by the demon of corrupt ceremonialism, ever ready to sacrifice helpless women and children to the tradition of a fancied orthodoxy."* The result is that a large proportion of little girls are hurried into matrimony long before their bodies are ready to support the strain it usually entails, and long before they are fitted to become the mothers of a healthy and a numerous progeny. In this respect Kamrup is better than Goalpara, but falls far short of the standard of excellence attained in the neighbouring district of Nowgong, where it is quite the exception to marry a girl before she is physically fit to undertake the functions of maternity. Another important feature of the matrimonial statistics is the proportion of potential mothers, under which head are classed married women between 15 and 40 years of age. Natural growth must largely depend upon this factor, and in this respect Kamrup is somewhat handicapped. In spite of the preponderance of women the proportion of potential mothers in 1901 was only 156 per mille, which is slightly lower than the proportion for the Province as a whole, and considerably lower than the proportion in the Central Provinces.

Infirmities.

Kamrup is fairly free from the two infirmities of insanity and deaf-mutism, and the proportion afflicted in 1901 was considerably below

	Kamrup.	Assam.	India.
Insane	4	5	3
Deaf-mute	5	9	6
Blind	12	10	12
Lepers	14	13	5

* Report on census of India for 1901, p. 433.

the average for the Province as a whole. The number of blind persons is, however, considerable, and the proportion of lepers exceeds the provincial average and is largely in excess of that for the whole of India. The statement in the margin shows the proportion per 10,000 afflicted in Kamrup, Assam and the Indian Empire as a whole. The figures refer to males only as the returns for females are, in the case of leprosy at any rate, not complete.

Language.

There is no district in the Province where Assamese is so generally used as in Kamrup. In 1901 it was returned by 83 per cent of the population, but the dialect in vogue is not as pure as that which is spoken in Upper Assam. Eleven per cent of the people returned Bodo or Plains Kachari as their customary form of speech, but most of these tribesmen use Assamese in their intercourse with the outside world. Assamese is described by Mr. Grierson as the sister not the daughter of Bengali*. It comes from Bihar through Northern Bengal and not from Bengal Proper. The plural and feminine gender are formed in a different way from that in use in Bengali, and there is a considerable difference in the conjugation of the verb, in the idiom, the syntax, and even in the vocabulary. The pronunciation is also different, the Bengali sh being converted into h by the Assamese and ch into s. Kachari, or Bodo as it is more properly called, is a fairly rich language remarkable for the ease with which roots can be compounded together. A grammar of this language has been

*Report on census of India, 1901, Vol. I., d. 324.

published by the Rev. S. Endle*. Mikir is another indigenous language which is spoken by the tribesmen of that name who are found in the south of the Gauhati subdivision. It forms a link between Bodo and the Naga group of languages but is more closely connected with the latter.

Caste and race.

Castes, which according to Assamese ideas are respectable, are more strongly represented in Kamrup than in any other district of the Brahmaputra Valley. The number of Brahmans is considerable, and forms about half the total number found in the whole division. After the Brahmans come the Ganaks, and two-fifths of the Ganaks of the Assam Valley were censused in Kamrup. Many of the Kayasthas are foreigners, but, in spite of its small foreign population, there are more Kayasthas in Kamrup than in any other district in the valley. It is, however, the Kalitas who give the touch of superiority to the district population. They represent the aristocracy amongst Assamese agriculturists, and more than half of the total number in the Province are found in this single district, where they form over a quarter of the total Hindu population. The Kewats, another reputable caste from whose hands a Brahman will take water, are found in considerable numbers, and there are other castes such as the Shaha and Saloi who enjoy this dignity. Respectability is, in fact, the keynote of the caste system in Kamrup. The Kacharis or Bodo, with their kinsfolk the Rabhas, are fairly strongly

* Shillong Secretariat Press, 1884.

represented, and there are naturally a large number of the Koch, the caste into which the Kachari is received on conversion. On the other hand, there are hardly any Ahoms or Chutiyas, the two race castes which are found in such numbers in Sibsagar and Lakhimpur. The European element in the population (64) is also small, the tea industry being of comparatively slight importance. In the following pages a short account is given of each of the castes which had 5,000 or more representatives in the district in 1901. An alphabetical glossary of all the castes of the Province will be found in the Census Report for that year.

Brahmans.

The number of Brahmans in Kamrup is larger than that in any other district of the Assam Valley. With the exception of a few families they belong to the Kanna branch of the Jajur Veda, and owing to the absence of the divisions inaugurated at the time of Ballal Sen they are known as the Western Vedics. According to the Kalika Puran, colonies of Brahmans were settled in Kamrup by Narak Asura before the war of the Mahabharata, and local tradition has it that the 72 Brahman families of Soalkuchi were present at the *sradh* ceremony of Bhagadatta, Narak's son. This is, of course, tradition and nothing more, but it seems fairly clear that Brahmans were settled in Kamrup from a very early period. Barbhag, Banbhag, and Barigog, three mauzas all within a few miles of Nalbari village, are the chief centres of the Brahman population, and there are considerable numbers of this aristocratic caste at

Males ...	... 11,399
Females ...	... 11,746

Pokoa and Dharmapur in Nalbari, and at Sila in the Barpeta mauza. Most of them make their living as cultivators, though they are, of course, obliged to get the actual ploughing done by others, and a considerable number go to Kuch Bihar and Eastern Bengal in search of work as priests, or, failing this more respectable calling, as simple cooks.

Garos.

Males	2,527
Females	2,617

The Garos are a tribe of Bodo origin, the bulk of whom are to be found in the hills that bear their name. According to their own traditions they came originally from Thibet and settled in Kuch Bihar. From there they were driven to Jogighopa, and thence to Gauhati, where they were enslaved by the Assamese. They were, however, delivered by a Khasi prince, and then travelled *viâ* Boko to the Garo Hills. Most of the Garos are to be found in the hilly country on the outskirts of the Khasi Hills. They live in better style than many of the hill tribes, and are to some extent differentiated from other members of the Bodo family by the good position accorded to their women and the extraordinary scantiness of the national costume. A full account of the manners and customs of the Garos will be found in the Monograph on the Garo tribe.

Jugis.

Males	8,636
Females	8,818

The Jugis are a low caste whose traditional occupation is weaving, and who are looked down upon by their superiors in the social scale. Like other humble castes they lay claim to a high origin. According to one account

they are the offspring of Brahman widows and ascetics, while others assert that they are descended from Gorakshanath, who was an incarnation of Siva. A few years ago the Jugis at Barpeta assumed the sacred thread, at the instigation of a Brahman priest, and declared themselves to be gentlefolk. It was suggested to them that they should prove their good position by requiring their priest to marry a Jugi girl; but the Brahman fled as soon as this proposal was made to him. Their attempt to raise themselves in the social scale was thus an utter failure, and they were entirely excluded from the *namghor*, though previously they had been allowed to enter the outer room.

Kacharis their origin.

Males ...	... 43,122
Females ...	... 48,982

The Kacharis or Bara (mispronounced Bodo), as they call themselves, belong to the great Bodo tribe, which is found, not only in the Brahmaputra Valley, but in the Garo Hills and in Hill Tippera, south of the Surma Valley. It is generally supposed that they are a section of the Indo-Chinese race, whose original habitat was somewhere between the upper water of the Yang-tse-kiang and the Hoang-ho, and that they gradually spread in successive waves of immigration over the greater part of what is now the Province of Assam. This theory has much to recommend it and is to some extent confirmed by a prayer which is in use amongst the Dimasa* in the North Cachar Hills. This prayer refers to a huge pepul tree growing near the confluence of the Dilao (Brahma-

*The Dimasa are the section of the Kacharis who live in the Cachar district.

putra) and the Sagi. There the Kacharis were born and increased greatly in numbers and thence they travelled by land and water till they reached Nilachal, the hill on which the temple of Kamakhya stands, in Kamrup. From Gauhati they migrated to Halali and finally settled in Dimapur. The inscriptions recorded on copper plates in the tenth and eleventh centuries A. D. refer to the conquest of Kamarupa by a foreign dynasty which was subsequently replaced by a king of the line of Narak*. It is possible that the Kacharis were the invading force, and on their expulsion from Gauhati they might not unnaturally have retreated towards the Dhansiri valley.

No connection between Kacharis of Kamrup and Dimapur.

The Kachari kingdom was one of the strongest powers with which the Ahoms were confronted when they entered the valley of the Brahmaputra. Their capital was located at Dimapur on the Dhansiri river, and at one time they were in possession of the western part of Sibsagar, and the greater part of the Nowgong district. Dimapur was sacked by the Ahoms in 1536, and the Kachari king was compelled to move his capital to Maibang. Subsequently they migrated to the plains of Cachar, and the last representative of the line was assassinated there in 1830. It seems, however, doubtful whether the Kacharis who live on the north bank of the Brahmaputra were ever in any way connected with the king of Dimapur. The one tribe style themselves Bara, the other Dimasa, and, though both use languages of Bodo origin, the difference between plains Kachari and Dimasa is greater

* *Vide* J. A. S. B., Vol. LXVII, Part 1, No. 1, 1898, page 99.

than that between French and Spanish. The two tribes sprang no doubt from the same stock, but there is no evidence to show that they were ever united by the tie of a common nationality, or that the Kacharis of Kamrup were more closely connected with the Kacharis of North Cachar, than are the Rabhas and Lalungs.

Dimasa legend of the separation of the two tribes.

The following legend is prevalent amongst the Dimasa. It would account for the separation of the Bodo and Dimasa, but no traces of the story have been found amongst the Kacharis of Kamrup.

"Long ago the Dimasa fought against a powerful tribe and were beaten in a pitched battle. They were compelled to give ground, but after a time further retreat was barred by a wide and deep river. In despair the king resolved to fight again on the following day; but in the night a god appeared to him and told him that the next morning the army could cross the river if they entered it at a spot where they saw a heron standing on the bank. No one, however, was to look back while the movement was in progress. The dream proved true. A heron was seen standing on the bank, and the king and a great portion of his people crossed in safety. A man then turned to see whether his son was following, when the waters suddenly rose and swept away those who were in the river bed and prevented the others from crossing. The Dimasa were those who succeeded in reaching the further bank in safety."

The ordinary Kachari of Kamrup is an illiterate villager who has only vaguely heard of the Kacharis of Nowgong, but knows that their language differs slightly from his own. He is quite innocent of history, has never heard of the Kachari raj, and as a source of information of anything prior to the immediate present is absolutely useless.

Social position and distribution of Kacharis.

At the present day the tribe is not split up into any endogamous or exogamous subdivisions. Their social

position is of course low, but the Hindu gosains are willing to receive them as their disciples, and, if they are prepared to abandon their pork and beer, will even enrol them as members of the Koch caste. The bulk of the Kacharis live on the grassy plains at the foot of the Himalayas, and are especially numerous in the Rangia, Tamulpur, Barama and Bajali tahsils. Their villages are surrounded with fences, but present a dirty and untidy appearance, as pigs and fowls are allowed to wander about in every direction. Agriculture is their normal occupation, and rice the staple crop grown. They are fully alive to the advantages of irrigation, and conduct the water of the hill streams on to their fields through little artificial channels which are made by the combined labour of the villagers. But, though efficient agriculturists, they have not that contempt for daily labour which is so marked a characteristic of the Assamese. They readily take work on tea gardens, and in 1901 nearly 14,000 Kacharis were censused on the plantations. Though still using their tribal form of speech in their own villages, most of them can speak and understand Assamese.

Religion. Their religion is of the ordinary animistic type, and is mainly concerned with the propitiation of the various devils who are the source of all their trouble. The principal god is called Siju and is represented by the cactus which is seen growing in the courtyard of every house. He is worshipped twice a year, at the time when the summer and winter rice are harvested, and is said to punish those who neglect this ceremony with an early death. The following is a list of some of the principal demons.

Buna, habitat uncertain, causes madness. Kabir, lives in trees, kills cattle and men by some form of rapid illness that attacks their chests and causes them to spit blood. Pani-debota, lives in water, causes rheumatism, is propitiated by one duck, one pair pigeons, four small fowls, unripe plantains, vermilion and tamul pan. These dainties are set afloat on a raft made of four plantain trunks fastened together, and it is to be hoped that the god is pleased. Pikhas, habitat uncertain, sends fever and is propitiated with one large fowl, seven small, one vessel of rice beer, and one pair of pigeons. Bira is another unpleasant deity who drives people, especially women, mad, and sets fire to houses. When elephants eat the dhan there is puja to the Buragohain or Siju, and when tigers kill the cattle to the goddess of tigers. Difficult labour, strangely enough, does not seem to be ascribed to the malignant action of any demon. It is treated with village remedies which, though probably of little use, cannot be less effectual than the pujas prescribed in other and less serious cases. When there is any uncertainty as to the particular deity responsible, an *ojha*, or wise man, is called in, who throws a handful of cowries on the ground, and from them receives a "sign," which enables him to ascertain the special puja necessary.

Funeral and marriage customs of Kacharis.

The Kacharis of Kamrup sometimes bury their dead, sometimes simply throw them into the jungle, and the funeral, as is generally the case amongst primitive tribes, is accompanied with a good deal of feasting. Girls are hardly ever married before they are fully grown, and

cost from Rs. 60 to Rs. 150. If the lover cannot obtain this sum he goes to the house of his father-in-law and works for him, and after five years' labour is allowed to remove his bride. Pregnancy prior to marriage does not entail any social disability provided that the father of the child is of the same caste. If the man declines to marry his mistress he is fined a pig, but if he is willing to take her he pays the bride price or works for her in the ordinary way. Others say that an illegitimate child can only pay its way into the tribe at the cost of thirty or forty rupees' worth of rice, pork, and liquor. If the paternity is admitted this feast is given by the father, but, when the unfortunate girl is unable to induce her lover to acknowledge his own offspring, the maternal grandfather is held responsible.

Kalita. The following account of the Kalitas is taken from the Census Report of 1901:—

Males	...	... 58,545
Females	...	... 57,045

"There is much uncertainty as to the origin of this caste. The popular explanation is that Kalitas are Kshattriyas, who, fleeing from the wrath of Parasu Ram, concealed their caste and their persons in the jungles of Assam, and were thus called Kullupta. Other theories are that they are Kayasthas degraded for having taken to cultivation, an explanation which in itself seems somewhat improbable, and is not supported, as far as I am aware, by any evidence, or that they are the old priestly caste of the Bodo tribe. The latter theory can hardly be said to account for their origin, and though it is possible that Kalitas may have originally acted as priests this fact throws little or no light on the problem of what the Kalitas are. The most plausible suggestion is that they are the remains of an Aryan colony, who settled in Assam at a time when the functional castes were still unknown in Bengal, and that the word 'Kalita' was originally applied to all Aryans who were not Brahmans. The Kalitas are divided into two main subdivisions, Bar and Saru, and into a number of professional

sub-castes. In Upper Assam, Bar Kalitas are said to decline to use the plough, though they occasionally work with the spade, but there is no such restriction in Kamrup, where the great bulk of the caste is found. Cultivation is, in fact, the traditional occupation of the caste, and they even consent to work as coolies on tea gardens. The usual procedure for a Kalita who has succeeded in rising above the necessity for manual labour, and is no longer compelled to follow the plough, is to call himself a Kaist or Kayastha. Two explanations are given of the origin of the Saru Kalita—one that he is the offspring of persons who for three generations back have not been united by the '*hom*' ceremony, the other that he is the child of a Bar Kalita and a Kewat woman. Whether the Bar Kalita can intermarry with, and eat *kachchi* with, the Saru Kalita seems open to question, and the practice apparently varies in different districts; but there seems to be no doubt that the functional subdivisions of the caste are debarred from the privilege of close intercourse with the Bar Kalita. These subdivisions are the Mali, Sonari, Kamar, Kumhar, Napit, Nat, Suri and Dhoba. The first two inter-marry with the Saru Kalita and also with the Kamar Kalita. The last four groups are endogamous. All these functional groups are to some extent looked down upon, probably because followers of these professions, who were not true Kalitas, have occasionally succeeded in obtaining admission within their ranks; but the goldsmiths, from their wealth, have secured a good position in society. Kalitas have a good Brahman for their priest, and their water is taken by every caste, a fact which no doubt explains the high value attached to Kalita slaves in the time of the Assam Rajas, when two Koches could be purchased for the price of a single Kalita, though the Koch is generally the hardier and stonger man of the two."

Early marriage is common in Goalpara, but not in Assam Proper, except amongst the upper sections of the caste. They take, in fact, a liberal view of the relations between the sexes, and cohabitation is the essential part of marriage. Well-to-do Kalitas are invariably united by the *hompura* rite and employ a Brahman, but the poorer people often content themselves with the *agchauldia* or *juron* ceremonies, which consist of a feast to the villagers and a public acknowledgment of the

position of the bride. Some authorities hold that this, though a valid form of marriage for the lower Assamese castes, is not sufficient for the Kalita. They regard the *hompura* rite as the one essential ceremony of purification, but it can be performed after cohabitation has begun, and sometimes takes place after the death of the husband. An unmarried girl who becomes pregnant does not forfeit her position in society, unless her lover is of a lower caste. The Kalitas are distributed all over the district, but are not numerous north of the Gohain Kamala Ali, or near Boko in the south-west corner of Kamrup.

Kayasthas.

Males	2,348
Females	1,974

Many of the Kayasthas are foreigners, and a considerable proportion of them earn their living as clerks or officers in the employ of Government. Kalitas who have risen above the necessity of manual labour frequently describe themselves as Kayasthas.

Kewats.

Males	21,415
Females	23,059

The Kewats are a respectable Hindu caste, from whose hands Brahmans will take water, and who according to Assamese ideas rank immediately after the Kalita. These remarks only hold good, however, of the Halwa or cultivating Kewats. The Jaliya, or fishing subdivision of the caste, occupy a very humble position in the social scale, and are considered little better than Nadiyals The two sections of the caste have nothing whatever in common except the name Kewat or Kaibartta, but the number of Jaliya Kewats is comparatively small. The Nadiyals have of recent years laid claim to the title of Jaliya Kai-

bartta, and the Halwa Kewats are so afraid of being in any way connected with such people or with the fishing subdivision of their own caste, that, in Barpeta, they have assumed the somewhat fanciful title of Maheshya Vaisya.

Koches.

Males ...	... 47,210
Females ...	... 46,743

The Koches are one of the race castes of Assam. Originally they were an aboriginal tribe, apparently of Mongolian origin, which, at the beginning of the sixteenth century, rose to power under their great leader Viswa Singh. His son, Nar Narayan, extended his conquests as far as Upper Assam, Tippera, and Manipur, and by the middle of the sixteenth century, the Koch king had attained to a position of such power that the aboriginal people were anxious to be enrolled as members of his tribe. The result is that, at the present day, the name is no longer that of a tribe but of a caste into which new converts to Hinduism are enrolled. In Sibsagar and Lakhimpur these converts still retain their tribal names, and the Koch is a respectable Sudra caste, which is not broken up into various subdivisions. This is not the case in Lower Assam, and the different groups are there allotted a different status, which is dependent on the time that has elapsed since conversion took place and the extent to which aboriginal habits have been shaken off. The principal subdivision is the Bar Koch, who are looked upon as a clean Sudra caste, and from whose hands Brahmans will take water. The same distinction is not accorded to the Saru Koch, though they conform in most essentials to the somewhat lax standard of Hinduism exacted in Assam. Three other subdivisions are

graded in accordance with the extent to which they have forsworn the attractions of unconverted life. The Kamtali abstain from intoxicating liquor and usually from pork, the Hiremia still keep pigs but no longer indulge in the use of liquor, while the Madahi are Hindus only to the extent of having taken *saran*, and still permit themselves great freedom in all matters of food and drink.

Kumhars.

Males	3,345
Females	3,333

Kumhars are by tradition potters, but, like so many of the functional castes in Assam, they have to a great extent abandoned their traditional occupation in favour of agriculture.

Mikirs.

Males	5,431
Females	5,162

According to Colonel Dalton the Mikirs were originally settled in the North Cachar Hills, but were driven westward into Jaintia territory by the Kacharis. Dissatisfied with the reception accorded to them there, they sent an embassy to the Ahom governor at Raha, offering to place themselves under the protection of his master. But, as the luckless delegates were unable to make themselves understood, they were forthwith buried alive in a tank which that officer happened to be excavating. Hostilities ensued, but the Mikirs were soon suppressed, and were settled in the hills that bear their name, though a considerable colony are still to be found in South Kamrup and the northern slopes of the Khasi Hills. They are divided into four tribes Chintong, Ronghang, Amri, and Dumrali, and these tribes are again subdivided into various

exogamous groups. In the hills the Mikirs live by *jhum* or shifting cultivation, and raise crops of cotton, chillies, rice, and vegetables. All the members of a family live in one house, which is thus of considerable size. Their religion is of the usual animistic type, and is chiefly concerned with the propitiation of evil spirits. Infant marriage is unknown and sexual license within the tribe prior to marriage is tolerated.

The Nadiyals.

The Doms, or, as they prefer to call themselves, Nadiyals, are the boating and fishing caste of Assam. They are anxious to assume the name Jaliya Kaibartta, but the Kaibarttas are unquestionably a different caste, though their manners and customs do not differ materially from those of the Assamese Nadiyal, except in the following particular. The Kaibarttas decline to use the *ghokota* net, and in theory only sell their fish on the river's bank within a paddle's throw of the boat, whereas the Nadiyals regularly take their catch to market. The Nadiyals are probably descended from the aboriginal race of Doms, the ruins of whose forts are still to be seem in India, but migrated to Assam before the Dom caste had been assigned the degrading functions now performed by them in Bengal. They are cleanly in their habits and particular in their observance of the dictates of the Hindu religion, and account for the objectionable name "Dom," which undoubtedly they have borne for centuries, by saying that they were the last of the Assamese to be converted from Buddhism. They are

Males	...	...	5,196
Females	...	...	5,322

darker in complexion than most of the Assamese, but have a good physique, and by no means uncomely faces. Their women are most prolific, and the Dom villages are full of fat brown babies. They rank very low in the social scale, and, according to Assamese ideas, are superior only to the Brittial Baniya or Hari. The bulk of the caste still live by fishing, and education has made but little progress among them. Marriage does not take place till the girl is fully grown, and they are free from any puritanical notions with regard to the relations between the sexes. Their priests are said to be descended from a Brahman father and Nadiyal mother, but for all practical purposes they are Nadiyals and inter-marry with Nadiyal girls.

Namasudra or Chandal.

Males	...	...	5,370
Females	...	...	5,248

The Namasudras are a boating and fishing caste, said by Manu to have sprung from the union of a Brahman woman with a Sudra, and therefore to be the lowest of the low. They are a cheerful and hardworking people, but are heartily despised by their Hindu neighbours, and a degraded Brahman acts as their priest. A section of the Chandals has formed itself into a separate caste called Hira. They work as potters, but do not use the wheel, laying on the clay in strips. Many of the Chandals have now taken to agriculture as their occupation. A large proportion of the Namasudras were censused in the Hajo and Nalbari tahsils.

Napits.

Males	...	...	2,432
Females	...	...	2,599

Most of the Napits are merely a functional section of the Kalita caste. The great majority of them are cultiva-

tors pure and simple and have exchanged the barber' razor for the plough.

Rabhas.

The Rabhas are a section of the Bodo race and appear to be an offshoot of the Garos

Males	...	8,039
Females	...	8,302

Their language is closely akin to Garo, and their original habitat seems to have been the northern slopes of the Garo Hills. Certain sections of the tribe, which live on the borders of that district, have no word for north and south, but describe the former idea by Bhutan, the latter by Tura, a fact which pretty clearly indicates the locality from which they originally came. Most of the Rabhas have, however, left their ancestral home and settled in Darrang, Kamrup, and Goalpara. In the last named district the bulk of the tribe are to be found south of the Brahmaputra. The Rabhas are divided into the following seven sections—Rangdania, Pati, Maitariya, Koch, Bitlia, Dahuria, Sangha. The Rangdania lay claim to a position of superiority, but inter-marriage is allowed with the Patis and Maitariyas. Inter-marriage between the first three sections and the lower subdivisions of the caste is permitted, but only on payment of a fine of about Rs. 100.

The Saloi.

The Saloi are supposed to be an offshoot from the Halwai or confectioner caste,

Males	...	3,637
Females	...	3,789

but in Kamrup they have taken to agriculture. They are classed as a clean Sudra caste from whose hands Brahmans can take water, and rank above the Shahas but below the Kewats.

The Shaha or Shau.

Males	...	... 6,751
Females	...	... 7,329

The Shaha are, theoretically, a sub-caste of Sunris or liquor-sellers, and, as such, occupy a very humble position in society. But, in Kamrup, they have taken to agriculture, and have succeeded in getting accepted as a clean Sudra caste from whose hands a Brahman can take water.

The Totlas.

Males	...	... 3,438
Females	...	... 3,577

The Totlas are a superior section of the Kacharis, and occupy an intermediate position between the Kachari and the Koch. They are said to be abandoning pork and fowls as articles of food, but still take liquor.

Religion.

Classified by religion the population of Kamrup in 1901 was distributed in the following proportions: Hindus 69 per cent, Animistic tribes 21 per cent, and Muhammadans 9 per cent. Hindus, again, are divided into three main sects, Saktists, who devote particular attention to the reproductive powers as manifested in the female, Sivaites, whose special deity is Siva, as represented by the phallus, and Vaishnavites, who worship Krishna. Some account of the Saktist creed will be found in the Census Report of 1901, and more detailed information will be found in "Hindu Castes and Sects" by Babu Jogendra Nath Bhattacharya, M. A., D. L., President of the College of Pandits, Nadiya. The Saktist creed is a matter of general and not merely local importance, and need not be described at length in a District Gazetteer. In spite of the fact that Kamrup is said to have been the cradle of the Tantrik rites, and that it contains, in Kamakhya, a

shrine which occupies a position of peculiar sanctity in the estimation of the Saktist community, the Saktists in 1901 formed less than 2 per cent of the total Hindu population of the district. Sivaitism was still more poorly represented, and only 573 persons in that year professed their adherence to the special mantra of Mahadeo.

Temples.

There are no less than thirty-three temples in Kamrup supported by grants of revenue-free or *nisfi-khiraj* land, without counting the fourteen smaller temples on the sacred hill of Nilachal, and the six temples in other parts of the district which have no regular endowment. The names of these temples, the mauzas in which they are situated, the area of their grants, the names of their founders and the date of the foundation, where known, will be found in a statement appended to this chapter. The two oldest, and by far the wealthiest and the most important, are the temples at Kamakhya and at Hajo. None of the others are known to date back further than the eighteenth century A. D., and, of the twenty-six temples for which particulars are available, no less them twelve were founded by Sib Singh, who reigned from 1714 to 1744 A. D.

Kamakhya.

Kamakhya is a place of pilgrimage visited by Hindus from every part of India. Of all the 51 *piths*, or places at which a portion of Sati's dismembered body fell, it is probably the most interesting and important, as the relic, concealed within the penetralia of the shrine, is no less a thing than the pudenda of the goddess. A temple is said to have been first erected by Narak in the heroic

period of the Mahabharata. In the course of ages the building disappeared, and even the legend of the shrine and its associations was forgotten, and it was reserved for Viswa Singh to re-discover this holy spot. He built a temple on the hill, but it was shortly afterwards destroyed by the Muhammadan fanatic Kala Pahar. In 1565 A. D. the temple was re-built by Nar Narayan, and was consecrated by a whole hecatomb of victims, including 140 men, whose heads were offered on copper plates to the goddess.* The basement of the existing temple, which is made of hewn stone, dates back to the time of Nar Narayan, but the superstructure is of more recent date. The dome is egg-shaped and is surrounded with little turrets. The temple as a whole is in excellent repair, and is remarkable for some curious bas-reliefs inserted in the wall, and for a row of statues of considerable size around the shrine. The other buildings on the hill are comparatively modern, and most of them were re-erected by the Maharaja of Darbhanga after the earthquake of 1897.

Beauty of the Nilachal hill.

But, though lacking in interest to the archæologist, Kamakhya should be visited by every lover of the picturesque. A paved causeway, which tradition says was constructed by Narak thousands of years ago, stretches from the trunk road to the spur on which the temple stands. The path is steep, and the rocks have been worn to a slippery smoothness by the feet

Vide the Koch kings of Kamrup, by E. A. Gait, J.A.S.B., Vol. LXII, Part I, No. 4, 1893.

of generations of pilgrims. The sides of the hill are rocky, in places even precipitous, but, wherever they can find a foothold, the giants of the forest have driven their roots into the earth, and huge pepul and rubber trees cast their shadows over the path. At either end it passes through an archway of fine masonry, and here and there the rocks along the side have been hewn into the semblance of quaint Hindu gods. From the summit of the hill there is a magnificent view over the surrounding country. Its feet are washed by the mighty Brahmaputra, whose channel at this point is shut in by rocks on either hand. To the south there are the tumbled masses of the Khasi Hills, rising out of the alluvium as cliffs rise out of the sea, the flat and fertile valleys, with which they are intersected, forming a striking contrast to their precipitous and jungle covered sides. On the north are fields of golden rice and yellow mustard, groves of palms and feathery bamboos, surrounded and enclosed by rocky hills, while far away in the distance are the blue ranges of Bhutan and the snowy peaks beyond.

Hajo.

The temple at Hajo is an object of veneration to Buddhists as well as to Hindus. It stands on the summit of a low hill and is approached by a long flight of steps. It is said to have been originally built by Ubo Rishi, and to have been restored by the Koch king Raghu Rai in 1583. A. D., after it had been damaged by the Muhammadans. The image in the shrine is a representation of the man-lion incarnation of Vishnu, but it is worshipped by the Bhutias under the erroneous impression that it is a statue of Buddha. The exterior wall of the temple is

adorned with bas-reliefs, and a dado of elephants runs round the dome. Hajo possesses a grant of more than 12,000 acres of revenue-free land, and a staff of dancing girls, an appurtenance which is not enjoyed by any other religious institution in Assam.

Other temples.

The other temples are all built after the usual Ahom pattern, and consist of a dome enclosing the shrine approached by a small nave. The material used is thin glazed brick, burnt almost to the consistency of pottery, and the dome is generally adorned with stone bas-reliefs let into the wall. Gauhati itself is well supplied with temples. There are three, all in a more or less ruinous condition, west of the hill on which the bungalow of the Deputy Commissioner stands There is another on the island of Umananda in the middle of the Brahmaputra, while on the north bank, the temple of Aswakranta stands on a rocky promontory and is approached by a long flight of steps. Krishna, so the story goes, halted here with Rukmini, and the holes now visible in the rocks are said to have been made by his horse's hoofs. A small island near the shore also owes its origin to Krishna, who created it to screen Rukmini when bathing, from the curious eyes of the people on the further bank. A little to the east of the club are the temple and tank of Ugratara, and beyond Ujan bazar is the temple of Chhatrakar. The dome is but a small one, but the walls are seven or eight feet thick, and are composed of layer upon layer of native bricks. The most interesting temple near Gauhati is, however, the one sacred to the

Navagraha or nine planets. It stands on the summit of a low hill east of the town, and the roof of the dome has completely disappeared. Looking down from above on to the floor of this open cockpit, one sees the altars of the sun and moon and seven of the planets. Each is represented by a *lingum* and *jonipthi* in conjunction, and is draped with cloth and adorned with flowers by the attendant priest. Nine miles south of Gauhati is the temple of Basistha. The building itself has little to recommend it, and is in a very ruinous condition, but it stands amongst the most romantic and picturesque surroundings. It overhangs a mountain stream which comes roaring down over huge rocks and boulders, and is shut in on every side by hills. The temple was erected in 1751 A. D. in honour of the great Rishi Basistha, who is said to have spent some time in this charming valley. Rudreswar is another temple near Gauhati which has historical associations. It was erected by Sib Singh in memory of his father the great Rudra Singh, who died at Gauhati in 1714 A. D., and differs from most of the temples in the district in that it is built on a vaulted plinth.

Vaishnavism.

A considerable number of Hindus did not attempt to specify their sect in 1901, but of those who committed themselves to this extent, nearly 98 per cent declared their adherence to Vaishnavism. This form of Hinduism is thus described in the Assam Census Report for 1901:

"Sankar Deb, the apostle of Vaishnavism in Assam, was born in 1449 A.D., and was the descendant of a Kayastha, who according to tradition had been sent, with six of his caste fellows and seven Brahmans, to Assam by the King of Kanaijpur as a substitute for the Assamese prime minister, who had fled to his

court for refuge. The licentious rites of Saktism had aroused his aversion while he was still a boy, and his desire to found a purer system of religion was increased by the teachings of Chaitanya in Bengal. Like most reformers, he met with vehement opposition from the supporters of the established order, and he was compelled to leave his home in Nowgong and to fly to the inhospitable jungles of the Barpeta subdivision, where, in conjunction with his disciple, Madhab Deb, he founded the Mahapurushia sect, the main tenets of which are the prohibition of idolatry and sacrifice, disregard of caste and the worship of God by hymns and prayers only. Sankar himself was, like a true follower of Chaitanya, a vegetarian, but the low-caste people, who formed a large proportion of his converts, found this injunction a counsel of perfection, and the Mahapurushias are accordingly allowed to eat the flesh of game, but not of domesticated animals, though, with a subtlety only too common in this country, they observe the letter of the law, prohibiting the spilling of blood, by beating their victims to death. The great centre of the Mahapurushia faith is the Sattra at Barpeta, where a large number of persons persist in living huddled together, in defiance of all the laws of sanitation, and resist with surprising pertinacity all efforts to improve their condition. They are a peculiarly bigoted people, and are strongly opposed to vaccination, with the result that the mortality from smallpox in the neighbourhood of the Sattra is exceptionally high. It was not long, however, before the Brahmans re-asserted their influence, and shortly after Sankar's death, two of his followers, who were members of this caste, established sects called, after their founders, Damodariya and Hari Deb Panthi, which are distinguished from the Mahapurushias by the respect paid to the distinctions of caste and a certain tolerance of idolatry. A fourth sect was founded by one Gopal Deb, but it originally seems to have differed in no way from the Mahapurushia creed, and subsequently its followers adopted the teachings of Deb Damodar. There is, in fact, practically no distinction between the Damodariyas, the Hari Deb Panthis, and the Gopal Deb Panthis, and the Vaishnavites of the Assam Valley can be divided into the Mahapurushia and Bamunia or 'other Vaishnavas,' as they have been called in the census tables. The former will accept a Sudra as a religious guide, worship no god but Krishna, and are uncompromising in their hostility to idols; the latter will only recognise Brahmans as their gosains, permit the adoration of other deities, such as Siva and Kali, in addition to that of Krishna, and allow sacrifices to be offered in their honour."

The Bamunias are also more liberal in their diet, and will eat goats, pigeons, and ducks, a form of food that is not allowed to orthodox Vaishnavites in Bengal. Madhab Deb, like most religious reformers, was a strict disciplinarian. The story goes that the breach between him and Gopal Deb arose one stormy day when the party were returning to Barpeta by boat. Gopal Deb, anxious for the safety of his teacher, apostrophised the storm clouds passing overhead, and begged them to restrain their fury till Madhab had reached the shore in safety. This innocent remark was construed into an invocation of Varuna, the god of rain. Gopal Deb was denounced as an idolater, and was incontinently, by order of Madhab, flung out of the boat. Such treatment was enough to damp the enthusiasm of the most ardent disciple. Gopal Deb, wallowing in the water, gallantly shouted out defiance to his former leader, and warned him that in future he would be treated with uncompromising opposition. Twenty-one per cent of the Vaishnavites in Kamrup in 1901 were said to be members of the Mahapurushia sect, but it would be unsafe to put much reliance on these figures.

Sattras.

A special feature of Vaishnavism in Assam are the gosains or priests, and the *sattras* in which they dwell. These *sattras* are small communities, resembling in some respects the monasteries of Mediæval Europe, but with this important difference that celibacy is not invariably regarded as a requisite. The central feature of the

sattra is the *namghar*, a large barn-like hall in which the people assemble for religious worship, and at the further end of which there is frequently a shrine enclosing an image of Vishnu in one of his numerous incarnations. Round this hall are ranged the houses of the resident disciples, and in Sibsagar the larger *sattras* are places of much dignity and wealth. There are no less than 56 *sattras* in Kamrup, but nearly all of them are small and unimportant. Those which are held in most respect are a branch of the great Auniati *sattra* near Gauhati, the Patbausi *sattra* near Barpeta, the Nij Patbausi and Sundaridia *sattra* in the same locality, the Chamaria *sattra* in Paschim Chamaria, the Khidirpukhri, Manpur, and Nahira *sattras* in Chayani, and the Baniyakuchi *sattra* in Sorukhetri. But all of these *sattras* are completely overshadowed by the famous institution at Barpeta.

The kirtonghar at Barpeta.

The *kirtonghar* at Barpeta stands in a compound about two acres in extent. On the north and south this compound is shut in by the lines occupied by the *keolia bhokots*, or resident disciples, while on the two remaining sides it is enclosed by a brick wall. The *kirtonghar* itself is a large building, 180 ft. by 60ft., with walls of brick and roof of corrugated iron. Adjoining is the *bhojghar*, which contains two idols, the *Kolia Thakur* and the *Dol Gobinda*, which are regarded as the presiding deities of the place, and various relics of Sankar Deb and Madhab Deb, such as *puthis*, hair, and stones bearing the impress of their feet. An oil lamp is kept continually burning before the idols, and if it flickers or goes out it is considered to be a

sign that trouble is coming to the *sattra*. Close by there are two small buildings called Bura Ata's *bheti*, and Badla Ata's *bheti*. Bura Ata was the first gosain who received charge of the *sattra* from Madhab Deb. The other *bheti* is sacred from its associations with Badla Ata, the founder of the Kamalabari *sattra* on the Majuli. The southern verandah of the *kirtonghar* is reserved for the use of the female devotees, who take part in the service but are not allowed to enter the actual hall itself.

A list of the different *sattras* in Kamrup will be found appended to this chapter. None of these institutions have, however, any considerable body of disciples, and a large proportion of the Bamunia Vaishnavites of Kamrup are the followers of the great gosains of the Majuli, whose *sattras* are described in the Gazetteer of the Sibsagar district. The disciple every year makes an offering to his gosain, which varies from four annas to one rupee a head. These sums are collected by the *medhis* or local agents of these holy men, and by them conveyed to the *sattra*. The *medhi* is generally a person of considerable influence in the village, he is exempted from making any personal contribution, and he receives a small fee on the occasion of the burning of any of his co-disciples.

Muhammadanism

Though the Muhammadans never succeeded in retaining their hold upon Kamrup for any length of time, they were on more than one occasion in possession of Gauhati, and the proportion of Musalmans (9 per cent), though considerably lower than that in Goalpara, is higher than in any other district of Assam Proper. Most of them are

found in the sadr subdivision, and they are especially numerous in the four tahsils which lie opposite Gauhati, *i.e.*, Hajo, Patidarang, Rangia and Nalbari.

Three classes of Muhammadans.

The Muhammadans of the district fall into three main classes. The *nagarias* or townsfolk are usually artizans, and those amongst them who are Assamese profess to be the survivals of Mir Jumla's invasion in 1662. They have to some extent inter-married with the people of the country, but are of comparatively pure descent, and their faith has been but little affected by Hindu superstitions. A considerable proportion of the townsfolk are, however, foreigners, who have only recently come from Bengal or Upper India. The Khalifas are supposed to be descendants of religious teachers who migrated to Assam some centuries ago. They have abandoned their original profession, which is no longer lucrative, and have taken to agriculture, but think it beneath their dignity to touch the plough or to carry a *bhar* or load affixed to two ends of a bamboo and supported on the shoulder, though they are willing to use the hoe or to carry things in bundles.

The ordinary Muhammadan villagers, who form the great mass of the adherents of that faith, are said to be fairly well acquainted with the principles of their religion. Prayers are duly said on Fridays in the more important mosques, and in some of the villages the people assemble in the open air on the occasion of the Id, after the fashion followed in the Idgarhs of the Muhammadan towns of Upper India. The fasts of Ramzan are observed in proper form, and here and there a villager is to be

found who has actually performed the pilgrimage to Mecca. They have, however, been to some extent affected by the customs of their Hindu neighbours. They believe in divination, and in the power of mantras and charms to drive away disease; they take a bride price for their daughters, and sometimes even observe the Bihu. A few people, who are known as *jahils* or the ignorant, can hardly be described as Muhammadans at all. They take a principal part in the pujas offered to Bishahari, the goddess of snakes, and pay little attention to the teachings of their faith. Between 1891 and 1901, the Muhammadans of Kamrup decreased by 3 per cent, but this was 4 per cent less than the decrease which occurred amongst the population of the district as a whole. Conversion is said to be far from common, and it was probably immigration and superior fecundity that kept the Musalmans from decreasing as rapidly as the Hindus.

The mosque at Hajo.

In the Hajo tahsil there are the remains of a mosque of unusual sanctity situated on the Mukamara hill. It is said to have been erected by Lutfulla Shiragi, Thanadar of Hajo, in 1657 A. D., and is known as Pao Mecca, either because a quarter of a seer of earth from that holy place was preserved in the mosque, or because a visit to this place confers one-fourth of the merit obtained from a pilgrimage to Mecca itself. Near the mosque is situated the tomb of Sultan Ghiyas-ud-din. According to one account he was the founder of the mosque but died before it was completed, while another, and less likely, story has it that he was defeated and killed by the Ahoms at Bishnath, and that his body was brought to

Hajo by his vanquished soldiery. In former days Hindus and Muhammadans alike used to make offerings at the tomb, and tie a thread to a neighbouring tree or post in order to obtain the fulfilment of their prayers. The mosque was, however, demolished by the great earthquake of 1897 and has not yet been restored.

Animism.

Most men find considerable difficulty in giving a clear and intelligible account of the faith that is in them, and the simple tribes of Bodo origin are no exception to the general rule. Broadly speaking, their religious beliefs seem to fall under the following heads. Unlike the German metaphysician, they have no uncomfortable doubts with regard to their own existence and the existence of the material world. To account for the production of these visible phenomena, they put forward various theories, which are hardly more improbable than the accounts of the creation given in most religious systems. The way in which the world came into existence is, after all, a matter of no very great importance, and the essential object of religion is to ensure a comfortable passage through life to its followers. No country or community is exempt from pain and trouble, and to the dwellers in the plains of India has been allotted a fairly liberal portion of the ills of life. When the cattle die, or small pox or cholera visits the village, or other trouble comes, it is only natural to suppose that somebody or something is the cause of these misfortunes. The untutored tribesmen then endeavour to ascertain the particular spirit from whose displeasure they are suffering, and to appease him in whatever way they can. Twenty-

one per cent of the population in 1901 were still faithful to their simple forms of tribal faith. These animistic people are found in every part of the district, but are especially numerous in the Gauhati tahsil, where they form nearly half of the population, and in Chaygaon, Boko, Rangia, Barama and Tamulpur. In Palasbari and the central portion of the plain lying north of the Brahmaputra the proportion of these people is comparatively small.

Buddhists Dewangiri.

Most of the Buddhists are either Bhutia traders who visit the plains in the cold weather, or Nepalese sawyers and herdsmen. There is, however, one Bhutia and Buddhist village within British territory, the Dewangiri, to which reference has been already made in the preceding chapter. The village stands about 1,800 feet above the level of the sea on one of the outer ranges of the Bhutan Hills. The path to it lies up the Darranga river, and, as the gorge is full of boulders, it is a somewhat trying march of from three to three and a half hours' duration from Darranga camp. The village is built on a saddle from which there is a fine view to the south over the Kamrup plain, while to the north there are ranges of forest clad mountains and the gorge of the Pagladiya. Along the ridge stand twenty tall masts, each some forty feet in height. A narrow strip of cloth, printed with Buddhist prayers, is fastened along the whole length of each mast, and cracks sharply in the wind that comes roaring up the gorge and across the ridge. In the centre of this row of masts is a

curious urn-shaped cairn, nearly twenty feet in height, that has recently been erected in Buddha's honour. The houses are small uncomfortable dwellings built on piles, with floors of wood, roofs of cane and plantain leaves, and walls of split bamboo. There is only one small room, with a little verandah in front and at the rear, and pigs, goats, and poultry scratch about beneath the chang. The whole place is dirty, squalid, and untidy, and, as the bamboo walls are full of holes, the people would suffer much from cold, were it not for the masses of filthy raiment that they wear, and the big fire place in the centre of the little room. The Bhutias *jhum* the hill sides in the neighbourhood, and raise crops of rice, maize, millets, chillies, cotton, pumpkins, sweet potatoes, and arums. They weave a considerable quantity of cloth from their home-grown cotton, and occasionally use for this purpose the fibre of a nettle which springs up round their houses. They seem, on the whole, to be fairly well to do, and are lightly taxed, as they only pay Rs. 2 per house to Government, and, in addition to this, give a cloth or two to the local representative of Bhutan. Prior to 1897, there were two other British Bhutia villages in the immediate vicinity, called Bompa and Sangduli. They were wrecked in the great earthquake, and the inhabitants started forth with all their goods and chattels to make a new home for themselves. They boldly crossed the Brahmaputra Valley and settled in the hilly country round Nongpoh, more than eighty miles away, but the place proved very unhealthy and most of the people died. The remainder decided to return once

more to the Himalaya, and founded a village in the hills beyond the frontier north of Mangaldai.

Minor religions.

The abstract in the margin gives details for other religions which were not strongly represented in the district in 1901. The Jains are the kaiyahs or merchants from Rajputana, most of whom were censused in Gauhati town. Here, too, were found the Brahmos, who are recruited from the ranks of the most advanced and educated natives, and the Sikhs.

Jains	...	...	163
Sikhs	...	...	46
Brahmos	...	...	16

Christianity.

The Christian population is not large, and in 1901 was represented by 64 Europeans, 36 Eurasians, and 1,379 natives. The American Baptist Mission has a centre at Gauhati, and nearly all the natives were members of this sect. Christianity seems to be spreading slowly amongst the people. In 1881 there were only 265 converts, and at the following census 876. There is a Roman Catholic priest stationed at Gauhati, but his work for the most part lies amongst the Eurasian community.

Occupation.

Kamrup is a purely rural area, and though the proportion of the total population supported by agriculture (81 per cent) is lower than that in any other district in the Plains, it is much above the average of the Indian Empire as a whole. The bulk of the agriculturists are peasant farmers who hold direct from Government, but, owing to the existence of large estates held by the representatives of temples and holy places, the number of tenants is unusually large, and they form about one-fourth of the cultivating classes. The preponderance of

agriculture as a means of occupation is due to two causes. The district contains only two small towns, and the urban population is but 3½ per cent of the whole. The functional castes are, moreover, very poorly represented. Under Ahom rule the people were compelled to satisfy the various requirements of the Raja, and special crafts and industries were allotted to different groups of villagers. As soon as the pressure of necessity was withdrawn, these people abandoned the occupations which had been forced upon them and took to agriculture, which in the East is always regarded as a respectable avocation. Farm labourers, though not numerous, are not so scarce as in the upper districts of the valleys, and fishing and the priesthood afford the means of livelihood of more than 3 per cent of the total population. The number of persons who, according to the census of 1901, were dependant on charity for their support was unusually high. A large proportion of these so-called mendicants were women, many of whom were no doubt living with their relatives, and would hardly be classed as beggars in the sense in which that term is generally used.

An account of the various industries followed in the district will be found in Chapter V, and no useful purpose will be served by examining in detail the figures recorded at the census. It has now been recognized that the census tables can give but a rough and general sketch of the industrial organization of the people, and the difficulty experienced elsewhere is accentuated in Assam, where there is so little specialization of function. Most of the artizans are farmers as well as craftsmen, and there is always a

certain amount of uncertainty as to the occupation which they will return to the enumerator. In the second part of the Census Report for 1901 details will be found for the 520 different heads into which the occupations of the people were distributed. These occupations were grouped together under eight main heads, for which the following figures were recorded :—

Government 2,290 ; pasture and agriculture 479,917; personal services 6,814 ; preparation and supply of material substances 50,872 ; commerce, transport and storage 7,359 ; professions 10,950 ; unskilled labour not agricultural 6,481 ; and means of subsistence independent of occupation 24,504.

Marriage customs.

The marriage customs of Kamrup differ in some respects from those in force in Upper Assam. In Sibsagar and Lakhimpur the custom of taking a bride price still prevails amongst the lower classes, but it is going out of fashion, and is regarded almost with abhorrence by the upper classes. In Kamrup, on the other hand, it is practically universal, and there is no caste that asks a higher price for its marriageable girls than the holy Brahman. A Brahman who has several sons will, it is said, be ruined, while one with a corresponding number of daughters is in a fair way to die rich. The community is a poor one, but in spite of this, Rs. 500 is by no means an uncommon price to ask for a Brahman girl. The contract must be made while the girl is still in her father's house, and, even if she dies before she comes to live with her husband, the price is not refunded. Not only

has the unfortunate man to pay for a girl whose society he has never been permitted to enjoy, but he is esteemed unlucky, and on this account will probably be charged a higher price when he next attempts to provide himself with a wife.

The use of the full *hompura* rite, in which the sacred fire of mango wood is lighted and a priest employed, seems to be commoner in Kamrup than in Upper Assam.* A less imposing ritual, which is sometimes followed by the lower classes, is known as the *agchauldia*. When the bride reaches the bridegroom's house she is seated with the groom in front of a lamp and a vessel filled with rice. Their cloths are tied together, and the women of the family take up pinches of rice, wave it round their heads and throw it into the air. The bridegroom then hides a ring in a vessel which the bride has to find, and they exchange cups filled with a mixture of milk, curds, and honey. In cases where a man is unable to pay for his bride he goes to live with his prospective father-in-law and helps to cultivate his farm. This period of probation lasts for several years, but during this time the girl generally concedes to him all the privileges of a husband. The cost of a bride amongst the lower classes is generally something between Rs. 50 and Rs. 100, and there is further expenditure to be incurred on clothes, ornaments, musicians, and a feast to all the friends and relatives. In the densely populated country round Nalbari a Sudra wedding will cost as much as Rs. 200, while Rs. 1,000 is by

* A description of the *hompura* ceremony will be found on page 63 of the Assam Census Report for 1901.

no means an unusual amount for a Brahman to expend. Marriage is thus a costly undertaking, and many a man is compelled to borrow money to obtain a wife. Amongst the animistic tribes there are traces of the old *asura* form of marriage by capture, but the elopements and abductions which are comparatively common in Sibsagar are not so often met with in Kamrup.

Amusements and festivals.

Feasts, singing parties, and *bhaonas* or simple theatrical performances are the principal amusements of the villagers. The *bhaonas* are often held in temporary sheds constructed by the roadside, and, on a winter's morning, the traveller who is early abroad, frequently comes upon parties of revellers still lingering over the pleasures of the previous night. The *dol jatra*, or festival in honour of Krishna in February or March, when the image of the god is swung to and fro and the people pelt one another with red powder, in memory of his amorous exploits with the milk maids of Brindaban, is observed indeed, but with much less ceremony than in other parts of India. The *Janmastami* in honour of Krishna's birth in August or September, and the Sivaratri in memory of Siva in March, are kept as fasts rather than feasts. The Durga puja, and the puja of Bishahari, the goddess of snakes, are also observed by certain sections of the people.

The Bihus.

The special festivals of the Assamese are the three Bihus, and the *sradh* ceremonies of Sankar Deb and Madhab Deb, the founders of the Mahapurushia sect. The Kartik Bihu is celebrated on the last day of Asvin

(October 14th), and is not an occasion of very much importance. Hymns are sung in honour of God, and in place of their usual meal of hot rice and curry, the people take cold food such as curds, molasses, plantains and cold rice. The Magh Bihu is the harvest home, and begins on the last day of Pous (January 14th). For weeks beforehand tall heaps of rice straw, piled round a central pole, are a prominent feature in the rural landscape. At the dawn of day the villagers bathe, and warm their chilled bodies at these bonfires, a very necessary precaution, as at this season of the year the mornings are always cold and generally foggy. The Magh Bihu is to some extent a children's festival, and most of the jollification is confined to the smaller boys, who sing, and dance, and feast in small grass huts that have been constructed for the purpose. The Baisakh Bihu, which begins on the last day of Choet (April 14th), is in honour of the new year. The cattle are smeared with oil mixed with matikalai, turmeric, and rice, and are then taken to the nearest stream and bathed. The villagers go from house to house visiting their friends and relatives, and offer them presents of cloths and other things. Buffalo fights are organized in the rice fields, but these contests are rather tame affairs, and the animals very seldom injure one another. A game is also played with eggs in which one is banged against the other, and the egg which cracks becomes the property of the owner of the cracker. The sradh ceremony of Sankar Deb is celebrated in August—September, and that of Madhab three days before the *Janmastami*. All

work is laid aside on these two days, and the people devote their time to feasting and the singing of hymns.

Other games.

In the Rangia and Nalbari tahsils there is a form of sport called *bhateli*, which is continued for some days after the Baisakh Bihu. Each village decorates a long bamboo with flags and streamers. The one that is adjudged the best is called the bridegroom. The others, who are termed brides, are then ranged round it in a circle, and a mock marriage ceremony is performed. On the last day of the gathering the villagers dance round the bamboos, brandishing their clubs, and the best bamboo or *para*, as it is called, is planted in a tank. At the Bihu time the villagers wrestle and jump and run against one another, a special form of race being the *hankhel*, in which it is not necessarily the fastest runner who wins but the one who can go farthest without drawing breadth. In the *fatik lai* a flower is thrown amongst the crowd and each man tries to catch it, but a more amusing variety of this game is the *narkal dalua*, in which the place of the flower is taken by a greasy cocoanut. The *biskuri khel* is a form of chevy or prisoner's base.

Statement of Sattras.

Name of mauza in which situated.	Name of sattra.	Name of mauza in which situated.	Name of sattra.	Name of mauza in which situated.	Name of sattra.
I.—CELIBATE GOSAINS.		II.—MARRIED GOSAINS—(*contd.*)		II.—MARRIED GOSAINS—(*contd.*)	
(*a*) *Brahmans.*		(*a*) *Brahmans*—(contd.)		(*a*) *Brahmans*—(contd.)	
Barduar ...	Sikarhati * ...	Barpeta ...	Patbausi * ...	Dakhinbarkhetri ...	Rampur.*
Chaygaon-pantan ...	Kaimari ...	Batasgila ...	Balikaria ...	Dakhinsarubangsar .	Chapathuri.*
Ramsa ...	Auniati ...	"	Katra * ...	"	Guimari.*
(*b*) *Sudras.*	...	"	Khudia * ...	Dharmapur ...	Bilampur.
Beltala ...	Tongora ...	Chayani ...	Agtala ...	"	Joardi.
Gauhati ...	Bartakowbari ...	"	Amranga * ...	"	Kaihati.*
"	Sarutakowbari ...	"	Khatismari or Manieri * ...	"	Kulbil.*
Rupasi ...	Jania * ...	"	Khidirpukhari* ..	"	Ulubari.*
II.—MARRIED GOSAINS.	...	"	Manpur * ...	Khata ...	Nalbari.*
(*a*) *Brahmans.*	...	"	Nahira * ..	Pakoa ...	Jagra †*
Barbangsar ...	Khehenipara * ...	"	Palasbari * ...	Pub Bajali ...	Anandapur.*

Barigog ...	Bali * ...	Chayani ...	Rajapukhuri * ...	Pub Bajali ...	Gobindapur.
"	Barbari * ...	Chenga ...	Harideb * ...	"	Haripur. *
"	Lasi Bistupur * ...	"	Jarbaradi * ...	Puschimbanbhag ...	Nilpur. *
Barpeta ...	Barpeta * ...	Dakhinbarkhetri ...	Damdama * ...	Sariha ...	Sidhapur. *
"	Keotkuchi * ...	"	Kachuya * ...	Sarukhetri ...	Badesila. *
				Sarukhetri ...	Baniakuchi. *
				"	Biahkuchi. *
				"	Parla. *
				Uparbarbhag ...	Ulabari. *
				Uttarbarkhetri ...	Naptipara. *
				Uttarsarubangsar ...	Bongsar.*
(b) *Sudras.* ...	...				
Barpeta ...	Nijpatabansi * ...				
"	Sundaridia * ...				
Chayani ...	Heramda ...				
Chenga ...	Sarnai * ...				
Paschimchamaria ...	Chamaria * ...				

† A *than* at which a *shobha* is held every year.

Note.—The *sattras* marked with asterisks hold grants of land at half the ordinary rates of revenue.

Temples.

Name of mauza or tahsil in which situated.	Name of temple.	Amount of land held.		Name of founder and date of foundation.
		Revenue free.	Half rates.	
GAUHATI SUB-DIVISION.		Bighas.	Bighas.	
Barbangsar ...	Dirgheswari ...	6,821	...	Raja Rajeswar Singh, circa 1751 A. D.
	*Madan kamdeb.	118	...	Not known.
Beltala ...	Basistha ...	193	664	Raja Rajeswar Singh in 1751 A. D.
Dharmapur ...	Billeswar ...	1,420	2,801	Not known.
Gauhati ...	Chandra Sekhar,	...	462	Raja Chandra Kanta Singh, circa 1820 A. D.
Gauhati town,	Baneswar ..	252	1,263	Raja Chandra Kanta Singh in 1820 A. D.
	Chhatrakar ...	2,288	4,959	Raja Kamaleswar Singh, circa 1795 A. D.
	Janardan ...	1,748	2,056	Raja Sib Singh, circa 1720 A. D.
	Sukleswar ...	1,287	4,176	Raja Sib Singh, circa 1720 A. D.
	Ugratara ...	454	357	Raja Sib Singh, circa 1720 A. D.
	Umananda ...	9,664	6,017	Raja Sib Singh, circa 1720 A. D.
Hajo ...	*Jay Durga ...	567	...	Raja Lakshmi Singh in 1774 A. D.
	Madhab ...	38,098	16,308	Restored by Raja Raghu Rai in 1583 A. D.
Kharija Baranti	Chandika ...	221	...	Raja Sib Singh in 1725 A. D.
Madertola ...	*Gopeswar ...	70	532	Raja Sib Singh, circa 1725 A. D.
North Gauhati,	Aswakranta ...	1,141	4,283	Raja Sib Singh in 1721 A. D.
	Manikarnikeswar,	192	848	Not known.
	Rudreswar ...	331	2,593	Raja Sib Singh, circa 1725 A. D.
Patidarang ...	*Pingleswar ...	376	965	Not known.
Pub Kachari Mahal	*Dipteswar ...	1,286	1,030	Unknown. Grant dates from 1764 A. D.
	*Kurma Madhab,	351	...	Unknown. Grants made to this temple by Sib Singh.

Temples.

Name of mauza or tahsil in which situated.	Name of temple.	Amount of land held.		Name of founder and date of foundation.
		Revenue free.	Half rates.	
GAUHATI SUB-DIVISION—(*concld.*)		Bighas.	Bighas.	
Ramsa ...	Chitrachal or Nabagraha.	210	...	Raja Rajeswar Singh, circa 1750 A. D.
	Kamakhya ...	23,685	...	The foundations of the present temple were laid by Raja Nar Narayan of Kuch Bihar in 1565 A. D.
	Pandunath ...	699	789	Raja Gaurinath Singh in 1780 A. D.
Upar Barbhag (Hajo tahsil).	*Syamrai ...	...	541	Not known.
Uttar Barkhetri	*Deobaharguri...	267	...	Raja Kamaleswar Singh, circa 1795 A D.
Uttarsaru Bangswar.	*Agni Baneswar,	99	...	Raja Sib Singh, circa 1730 A. D.
	†Bhringeswar ...	500	1,727	Raja Sib Singh, circa 1730 A. D.
	†Dhareswar ...	1,732	...	Raja Sib Singh, circa 1730 A. D.
	Siddheswar ...	474	...	Raja Sib Singh, in 1723 A. D.
BARPETA SUB-DIVISION.				
Bajali ...	*Dubi or Parihareswar.	1,280	1,760	Raja Lakshmi Singh, circa 1770 A. D.
Barpeta ...	*Basudeb ...	1,024	58	Raghunandan Chakravarty.
"	*Dakreswar ...	53	378	Madhab Ram Kalita Thakuria.

Note.—The great majority of these temples are built of brick and stone. Those marked * are kutcha buildings only, of reeds, bamboos, and thatch. At the places marked † there is no building at all. At Bhringeswar the images are placed in a cave. At Dhareswar a spring gushes continuously over the place of worship.

Statement of temples having no endowment.

Name of mauza in which situated.	Name of temple.
Ramsa	Amratakeswar.
Rupasi	Iswar Pateswari.
Chapaguri	Kujideb.
Khata	Kali.
Chaygaon	Buragosain.
North Gauhati	Kurma Janardan.

CHAPTER IV.

AGRICULTURE AND FORESTS.

Crops grown.—Rice—Mustard and pulse—Fibres—Storage and threshing of grain—Agricultural implements—Sugarcane—Preparation of Molasses—Causes affecting productiveness of land—Garden crops—Yield of crops—Area of unsettled waste—General remarks—Irrigation—Live stock—Cattle disease—Grazing—Commencement of tea industry—Early days in Kamrup—Development and decline of the industry—Labour supply—Soil—Varieties of plant—System of cultivation—System of manufacture—Green tea—Forests—System of management—Reserves and timber trees—System of working—List of important reserves.—

Crops grown.

The staple food crop of the district is rice, which, in 1902-03, covered 75 per cent of the total cropped area. Other important crops are mustard, 11 per cent, and orchard and garden crops 6 per cent. A large part of the area shown under the latter head is, however, occupied by the homestead, and it is doubtful whether as much as one half is actually under cultivation. Miscellaneous food grains, nearly all of which are different forms of pulse, occupied 4 per cent of the total cropped area, sugarcane 0·7 per cent, and tea 0·6 per cent. Wheat and gram, the food grains of Upper India, are grown in small patches by immigrants from those parts, but the total area under these two crops in 1902-03 was only 14 acres. The area under the staple crops in 1901 and subsequent years will

be found in Table VII. The general system of cultivation and the manner in which the different crops are raised is described in the following paragraphs:—

Rice
Sali dhan.

There are many kinds of rice, and no less than 147 different varieties have been reported from the district, but, for general purposes, the cereal is divided into three main groups, *ahu*, or early rice, *sali*, or late transplanted rice, and *bao*, or late broadcast rice, which is grown in flooded tracts. The percentage of the total area ordinarily occupied by these three classes is—*ahu* 32 per cent, *sali* 49 per cent, and *bao* 19 per cent.

Sali dhan is first sown in little beds or nurseries (*kothiatoli*) which are generally situated near the homestead. Three different systems are in vogue for the sowing of this seed. Sometimes it is sown on high land which has been ploughed up till it has been reduced to a fine tilth but has not actually been puddled, but more usually it is sown on a bed of mud. When the land lies low and is exposed to flood a third course is adopted which consists of a combination of the other two, the seeds being first sown on a dry bed (*dhuliya*), transplanted into a puddle nursery, and finally moved once more to the field in which it is intended that they should reach maturity Plants which have been treated in this way, or *joa kathiya* as they are called, are said to be unusually strong and to be less likely to suffer from too prolonged submersion. The ploughing of these seedling beds is begun towards the middle of March, and the seed is sown about a month later. It comes up a rich emerald green, and, at the beginning of summer, these patches of the

brightest herbage are a striking feature in the rural landscape. In the meanwhile the fields are being got ready for the reception of the seedlings. The husbandman starts ploughing as soon as the soil is softened by the spring rain, and repeats the process from four to six times till he has reduced the land to a rich puddle. After the second ploughing the field is harrowed, the little embankments, a few inches high, intended to retain the water, are repaired, and if the fields adjoin the road or the village site, they are often fenced in with split bamboo. When the seedlings are from four to six weeks old, they are taken from the nursery bed and carried in large bundles to the field. Here they are planted out in handfuls (*gosa*), each of which contains four or five plants. The distance at which these are planted from one another depends upon the fertility of the soil, the kind of rice, and the season at which they are planted, and varies from nine inches to as much as two feet. From the middle of July to the beginning of September is the best season for transplanting paddy, and plants that are put out later generally suffer. The work is of a most arduous description, as it involves stooping for hours in a field of liquid mud under the rays of a burning tropical sun; and it is not to the credit of the people that they generally leave it to their womenkind. Before the end of the rains, the crop is fully grown though the ears are still empty, but about the middle of October they begin to fill, and, a few weeks later, the field turns to a rich yellow. From the end of November to the beginning of January harvesting is going on. The reapers

grasp a handful of the ears and cut them off about eight inches below the head. These handfuls (*muthiya*) are tied up and left in the field for a few days to dry. When the grain is ready to be transported to the granary the *muthiya* are made into larger sheaves, six of them forming a *jhap*, and five or six *jhaps* a *dangari*. A *dangari* is then affixed to either end of a sharp pointed bamboo called *hulabari*, or *banka*, if it is a split and therefore springy bamboo, and the load, which is called a *bhar* and is carried across the shoulder, is taken to the homestead by the men.

The different kinds of *sali* dhan fall under two main divisions *lahi* and *bar*. *Lahi* ripens earlier than *bar*, and though the grain is of a finer quality, the yield is appreciably smaller. It is planted on the higher fields which dry up first at the conclusion of the rains and are thus unfit for *bar*.

Bao dhan. *Bao* dhan is sown broadcast in flooded tracts about the beginning of April, and the longest stemmed varieties, such as the *pani kekoa*, will thrive in as much as ten feet of water, provided that the floods rise gradually and do not drown the crop when the shoots are young and small. *Bao* is very largely grown in the Hajo tahsil, where it covers nearly half the total area cropped with rice, and it is also an important item in Patidarang and Palasbari. It is fairly common in Rangia, Nalbari, and Chaygaon but is naturally not much grown in the northern part of the district, where the level of the land is considerably higher than it is in the neighbourhood of the Brahmaputra. It is sometimes sown in conjunction with *ahu*, the earlier crop being reaped before the *bao* is ripe.

Ahu saru and bar dhuliya.

There are three different systems for the cultivation of early rice which are known respectively as *dhuliya*, *acchra*, and *kharma*; and *dhuliya ahu* is again subdivided into two varieties, *bar* and *saru*. *Saru dhuliya* is sown on land which lies too high for *sali*, and, as its name 'dusty' implies, it is grown on fields which have not been reduced to puddle. The outturn is smaller than that obtained from *sali*, but after the earthquake, when large tracts of transplanted rice land were rendered quite unculturable, the villagers were compelled, in places like Rangia, to sow the higher lands with such rice as they would grow. *Bar dhuliya* is grown on *chapori* land, where the usual procedure is as follows. In May the jungle is pressed down and burnt and the land left till towards the end of the rains. The jungle that has sprung up in the interval is then cleared in the same way, the process being known as *gojola kata*, and ploughing begins in September. The field is ploughed three times and harrowed, and the clods are broken up by a mallet. Another ploughing and harrowing follow, the seed is sown about March and the land again ploughed and harrowed to ensure that the grain becomes thoroughly mixed with the soil. When the plants are about six inches high and catch the wind, *botah boloah*, they are harrowed again and weeded, and finally harvested about the middle of June. The crop is, however, a precarious one and is liable to be destroyed by a sudden rise of the river. The plants can live under water for as much as a week, but if after this time the floods do not retire they are permanently destroyed. The same field is seldom cropped for more than three

years in succession. The weeds, which were unable to find a lodging under the dense growth of *ikra* (*saccharum arundinaceum*), *khagari* (*saccharum spontaneum*) and *nal* (*phragmites roxburghii*) with which the land in its natural state is covered, soon spring up when once the reeds have been burned. After the third year it is less trouble to burn fresh jungle than to clear the old fields of weeds, and by a change of site the peasant gets the further advantage of the manure of ashes for his next year's crop.

Acchra and kharma ahu.

Acchra ahu is sown broadcast on wet land, but the seeds, instead of being sown dry, are steeped in water for a short time and kept in a cool place till they begin to germinate. *Kharma ahu* is transplanted, and the system of cultivation does not materially differ from that employed in the case of *sali*, except that it is both sown and harvested much earlier than winter rice. *Kharma ahu* is generally grown on irrigated land in the Kachari mauzas north of the Gohain Kamala Ali. *Ahu* is also sometimes sown on fields which are subsequently planted out with *sali*, but this system of double cropping exhausts the soil and is not generally resorted to. *Ahu* is not very largely grown south of the Brahmaputra except in the *chaporis* in Boko tahsil, but it covers a large area in the Rangia tahsil, and is a very important crop in Barama, Hajo, and Patidarang. In the Tamulpur tahsil, where most of it is transplanted, it is not far short of half the total area under rice, and in the Barpeta subdivision it occupies about two-fifths of the area under that important cereal.

Chapori land, from which a crop of *ahu* has been taken, is generally used when the floods subside either for pulse or mustard. Ploughing begins as soon as the land is dry, and towards the end of November the seed is scattered broadcast. Mustard sown on cold damp soil does not thrive, and if it is sown late it is liable to be attacked by insects, so that the timely subsidence of the floods is a factor of much importance in the cultivation of this crop. The plant ripens about the middle of February, and after it has been pulled is left to dry for a few days in the field before it is removed to the threshing floor. Mustard is extensively grown in the Hajo, Boko, Rangia, and Barama tahsils, the Bijni mauza and the Barpeta *chaporis*. Mustard and pulse.

Pulse is often grown on the alluvial flats that fringe the Brahmaputra in conjunction with summer rice and mustard, but a crop is also taken from the land on which rice seedlings, early rice, and sugarcane have been grown, as it is generally and rightly thought to improve the quality of the soil. In the *chaporis* if new land is taken up the first proceeding is to cut and burn the reeds and grass. Only two ploughings are required, and those are of the very lightest character, and, if the ground is naturally clear of jungle, the seed is sometimes simply sown on the river flats as soon as the floods subside. *Kalamah* (*lathyrus sativus*) is also scattered broadcast amongst the rice stubble, or between the *sali* plants, if the land is still soft, but this method is not generally in use. The seed is sown in September and the crop is ripe about four months later. The plants are pulled up by the roots, left for a few days in

the field to dry, and are then collected at the convenience of the cultivators. The seeds are threshed out by cattle, but as the grains do not separate readily from the pods, their efforts are supplemented by a man armed with a stout bamboo. Several different kinds of pulse are grown, the commonest of all being the variety known as *mati-mah* (*phaseolus mungo radiatus*). Other kinds are *magu-mah* (*phaseolus mungo linn*), a species which has a smaller yield and requires more careful cultivation, but commands a higher price and possesses a more delicate flavour. It is seldom grown except on the river *chaporis*.

Kala mah (lathyrus sativus) is a cheap pulse, but as it has a large yield it is fairly widely sown. Another variety is the lentil *masur-mah* (*lens esculenta*) which is also grown, in conjunction with mustard, on *chapori* land from which a crop of summer rice has been already taken. The principal pulse producing tracts are to be found in the Palasbari, Rangia, and Patidarang tahsils, but very little is grown in the Barpeta subdivision.

The cultivation of jute is said to be slowly spreading up the valley, but it has not as yet made much progress in Kamrup, and in 1903-1904 the total area under this fibre was only 1,030 acres. About half of the crop was raised on the south bank, and, north of the Brahmaputra, Hajo and Rangia seem to be the only tahsils in which it is grown for sale. The seed is sown on fairly high land and the plants are cut in August and September, stripped of their leaves, tied in bundles and left to rot in pools of

water for from seven to twelve days. When they are ready a handful of stems is taken up, broken in the middle, and beaten to and fro in the water, till the inner part drops out and only the fibre remains. The bundles of fibre are then dried and are ready for use. Small patches of rhea (*Bœhmeria nivea*) are grown in the gardens of the fishing castes, where they are heavily manured. The skin is stripped off from the stem and the fibre separated from the outer covering. The thread obtained is exceptionally strong and durable, but the difficulty of decortication has hitherto prevented the growth of rhea on a commercial scale.

Storage and threshing of grain.

The custom in Kamrup differs from that prevailing in Upper Assam, and the rice is threshed as soon as it is carried home. The sheaves are untied and spread over the courtyard, and cattle are driven round and round over the heap of grain and straw till the ears have been finally separated from the stalk.* The grain is next passed through a sieve, and placed in a flat bamboo tray called *kula*. It is then jerked into the air and allowed to fall back into the tray, or held aloft and allowed to fall slowly to the ground, till gradually the chaff is carried off. After threshing the paddy is stored in huge drums, called *dhulis*, which are made of split bamboo plastered over with clay and cowdung. The rice that is required for seed is kept in loosely plaited bamboo baskets wrapped round with straw. Bundles of pulse seed are more

* An experiment made by Mr. Darrah, D.L.R. and A., showed that nine bullocks took 2 hours and 8 minutes to thresh out 7½ maunds of paddy.

carefully protected, and the straw is well smeared over with a mixture of cowdung and mud.

Agricultural implements: The plough. The agricultural implements in use are of a very simple character. The plough is usually made of the jack fruit tree, or some other hard wood, and consists of three parts—the handle and body, which are usually all in one piece, the pole which joins the plough at the junction of the handle and the body, and the yoke, which is merely a piece of wood, fastened by rope at right angles to the pole, with pegs affixed to it to keep it from sliding from the necks of the bullocks. The front portion of the body is sharpened to a point, which is shod with iron, and in soft soil a piece of bamboo is sometimes substituted for the iron. This piece of iron is the only portion of the plough which the farmer has to purchase; the rest he makes for himself. The whole instrument is suited to the wretched class of animal required to draw it. It weighs, as a rule, about 20 lbs., and when cattle are used the yoke seldom stands as much as 36 inches from the ground. It is obvious that such an implement can only penetrate from three to four inches into the soil, but the wretched quality of the plough cattle prohibits the use of a more effective instrument. When buffaloes are employed the whole plough is constructed on a larger scale, and as they are yoked not singly but in pairs, the work is so much harder that two ploughmen are required to relieve one another at short intervals.

Other implements. The harrow (*moi*) is generally a bamboo ladder about eight feet in length, on which a man stands as it is

drawn across the field. It is used to crush the clods turned up by the plough before mustard or summer rice is sown, and to reduce the fields required for wet rice to puddle. Its place is sometimes taken by a plain log of wood. It is prepared by the cultivator himself from the bamboos growing in his garden. Clods are broken by the mallet (*dheli mari*), which is also made at home. Hoes (*kodalis*) are used to trim the embankments which help to retain the water. The head is bought in the bazar and costs from Re. 1 to Re. 1-4, and is fitted with a shaft by the farmer himself. Sickles, with which the rice is reaped, have also to be purchased, and cost from two to four annas. In *ahu* cultivation a large wooden rake (*bindha*), with teeth nearly one foot in length, is dragged over the crop by a bullock when the plants are about six inches high. The *nirani*, a kind of trowel with a long handle, is used for weeding *ahu* rice. The sugarcane mill is described in the paragaph dealing with the preparation of molasses. The ordinary implement used for husking grain is the *dheki*, a long beam with a pestle affixed at the end, which is supported by two posts at about two-thirds of the length from the head. The shorter end is depressed by the foot, and the pestle is thus raised into the air; the weight is then removed and the pestle falls into a hole in a piece of wood sunk level with the ground in which the grain is placed. The *dheki* is the implement ordinarily employed by the Assamese to husk their rice or pulse, but the animistic tribes generally use a large wooden mortar (*ural*) and a pestle (*muri*); all of these implements are made at home.

Sugarcane. Sugarcane (*saccharum officinarum*) is usually grown on high land near the village site, and, as the soil is poor, it has to be well manured with cowdung; but, north of the Brahmaputra, it is sometimes planted out on land which is fit for transplanted rice and which is surrounded by a bank to keep out the water draining from the higher levels. The crop is propagated from the tops of the best canes, which are cut off at harvest time and kept in a shady place. One of these tops yields on the average about five canes, and as they contain but little juice, the cultivator does not sacrifice much of the gross product of his fields in the cause of reproduction. Four principal varieties of the plant are recognised. The *bagi* or white stands about seven feet high, and has a yellow cane of a soft juicy texture. The *teliya* is shorter, harder, and thinner, and the canes are of a deep red or even purple colour. The *Bangala* or *bam*, a foreign variety, is larger and more juicy than the indigenous kinds. The *mahala* is a hard and thin variety which yields comparatively little juice, and where grown is planted round the edge of the field. The land is hoed up till it is reduced to a fine tilth and the tops planted in trenches between April and June. The patch is fenced with split bamboo, and there is usually a stout hedge of arhar dal (*cajanus indicus*), but constant watching is required to scare away jackals and other animals, and an empty oil tin with a clapper is generally to be seen suspended over each field. While the crop is growing it is continually hoed and weeded, and about August the leaves should be tied up round each cluster of canes, which is a troublesome proceeding. The

earth from the ridges is heaped about the roots to strengthen their hold upon the soil, and this process is continued until the relative positions of ridge and trench are reversed, and the canes stand upon ridges with the trenches in between. Harvesting goes on from January to April, and during the winter nights and in the foggy mornings the drone of the sugarcane mill is heard coming across the fields in nearly every part of the district, where the "works of men" are to be seen.

Preparation of molasses.

The native form of mill is still often used for the extraction of the juice, but attempts have been made to introduce the iron mill, and some two or three hundred are now hired out to cultivators, the rate usually charged being a rupee a day. The native mill consists of two wooden rollers fixed side by side in a trough hollowed out of a heavy block of wood. The tops of the two rollers pass through a hollow beam supported by uprights let through the lower block of wood into the ground, and are cut into the form of screws which fit into one another. To the larger of the two (*mota bhim* as distinguished from *maiki bhim*) is affixed a pole, which is driven round in a circle, and thus causes the rollers to revolve. The motive power is usually supplied by the villagers themselves, but buffaloes are occasionally used for the work. The mill requires rather more knowledge of carpentry for its production than the other implements of agriculture, and can only be made by the more skilful of the villagers. The cane is placed between the rollers and crushed as it is slowly forced through. Each handful is passed through the mill three or four times, till nothing but foam

appears. The juice trickles from the trough into brass or earthen vessels, and is then transferred to a small boat scooped out of a log. When twelve or fifteen gallons have been collected boiling begins. The furnace is hollowed out of the ground and has four circular openings to receive the cauldrons, which are generally made of iron. Two of these vessels are placed about nine feet from the furnace mouth, and only serve to heat the juice before it is transferred into the other vessels to be boiled. Sometimes all of the vessels are placed immediately over the fire, but differ considerably in size. The smaller ones boil first, and their contents is then added to the larger vessels, and so help to raise their temperature. When the juice has been reduced to the proper condition it is ladled into a wooden vessel (*ghutna*) shaped like a small dug out, and is stirred for an hour or two. As the stirring continues the liquid loses its dark brown colour and assumes the consistency and hue of yellow mud. It is then stored in earthen pots and the process is complete.

Causes affecting productiveness of land.

The fertility of the rice fields mainly depends upon the following five causes, the water-supply, the quality of the soil, and the liability to injury from flood, wild animals or shade. The first named factor is probably of most importance, as irrigated land in the submontane tracts yields bumper crops from light and sandy soil. The soil of the district varies from pure sand near the Brahmaputra to clay so stiff as to be utterly unfit for cultivation. The land best suited for the growth of rice is a clay loam, *atalatiya*, the most fertile variety of which is called *bherbheria*, and is particularly deep and soft. *Bherbheria*

land is found at the lowest part of the rice basins, and is enriched by the drainage from the village site. *Mohbeliya* is composed of fine sand and loam, and is well adapted for the growth of crops which have to be sown before the soil is moistened with the rain, as, even when dry, it does not bake very hard. *Kachua* is so stiff a clay that water makes but little impression on it, and it is only fit for the growth of *bao*, and not much good for even that. The animals which do most injury to the crop are pigs, elephants, and monkeys. Elephants leave disastrous traces of their presence, but luckily do not remain long in any one locality. Serious damage is sometimes done by insects which are called *keonkata*, *tupalia*, *gandhi* (*leptorisa acuta*) and *chara* (*hispa acuesceus*). The *gandhi* is a small bug which injures the rice plant by feeding on the stems, and sucking all the sap from the young grains. It is most prevalent in July and August; and is particularly on evidence during a spell of hot dry weather. High wind and rain drive it back into the jungle, and good results are obtained by lighting fires of vegetable refuse to windward. The best remedy of all is to collect the insects by smearing a winnowing fan with some glutinous substance and pushing it over the ears of grain, when many of the bugs will be found adhering to the fan. This remedy should be tried in the morning or late afternoon, as the insects do not feed in the heat of the day. The *chara* is a tiny beetle, which eats away the outer surface of the leaves and stalks, and thus affects the outturn of the crops. It attacks the young plants in the nursery and can most

easily be destroyed there by spraying.* Smoking the fields also produces good results, but must be continued for some days or the beetles will return. Birds such as the *kaim* and *choka* also do some damage to the rice. Rain is wanted when *sali* is sown and is transplanted, but is not needed for the sowing of *ahu* and *bao*. During every stage of its growth the plant is benefited by moderate showers, but rain is absolutely essential at the time when the ears are first appearing Hail-storms in December sometimes lay the crop and add materially to the cost of reaping, but fortunately are very local in their action.

Garden crops. The plantain.

One of the most valuable of garden crops is the plantain (*musa sapientum*). As many as ten main varieties of this tree are recognised, but the most important are those known as *athia*, *monohar*, *cheni champa* and *malbhog*. The first two groups are again subdivided into a considerable number of different species. The commonest form of *athia* is called *bhim*, a large tree which is found growing in the garden of nearly every house. The fruit is considered cool and wholesome, and is very generally used as food for infants. The *monohar* is a somewhat smaller tree; the pulp of the fruit is white and slightly acid in taste, and is largely used in combination with soft rice and milk at village feasts. The *malbhog* and *cheni champa* are small trees, whose fruit is much appreciated by Europeans. The *athia* plantain is generally grown near the homestead where it can obtain a plentiful

* The best solution is 1 lb. Paris Green, 1 lb. freshly slaked lime or flour and 150 gallons water. The solution should be kept constantly stirred and should be sprayed on with a fine sprayer.

supply of manure. The finer varieties are planted at a little distance to protect them from the earthworms, whose attacks they are hardly strong enough to resist. Sandy soil and heavy clay check the growth of the plant, and anything in the shape of waterlogging is most injurious. The trees are planted in holes about a foot wide and eighteen inches deep and are manured with cowdung, ashes, and sweepings. Young saplings take from eighteen months to two years to flower, and the flowers take from three to six months to turn into fruit. The plantain tree plays many parts in addition to that of fruit purveyor. The flower is much esteemed as a vegetable, the leaves serve as plates, and the trunks are used for decorative purposes on occasions of ceremony, and as food for elephants. An alkaline solution distilled from the sheaths and the corm of the *athia* is often used as a spice with curry. These portions of the tree are sliced, dried, and reduced to ashes The ashes are placed in an earthen pot in which there are several holes lightly plugged with straw. Water is then poured over them, which dissolves the alkali and trickles through the holes into the receiver below. The resulting product, which is known as *kharpani*, is used not only as a seasoning but as a hair wash, and as a mordant with certain dyes.*

Other garden crops.

The betel nut (*areca catechu*) is grown almost as universally as the plantain, and, with the bamboo, forms

* The manufacture of *kharpani* is referred to by the historian of Mir Jumla's invasion. "Some of the natives dry the *kelah* plant in the sun, burn it, and collect the ashes in a white sheet which they fix on four poles. They then gradually pour water on the ashes and catch whatever percolates in a vessel below the sheet. The liquid is salt-petre like and very bitter; but they use it as salt."—J. A. S. B., Vol. LXI, Pt. 1, No. 1, 1872, page 77.

the great trinity of trees in which the houses of the Assamese are usually embedded. The plantation is hoed up and kept clear of weeds, and the trees are most liberally manured with cowdung. The pan vine (*piper betle*) is frequently trained up their stems, and the leaf and nut, which are generally eaten in conjunction, are thus grown side by side. Tobacco is a plant which is to be seen growing in the majority of gardens. The seedlings are raised in carefully manured beds in August and September. At the beginning of November, they are transplanted into ground which has been reduced to a fine tilth, watered for a few days, and protected from the sun by little sections of the plantain trunk The bed is lightly hoed up two or three times, and not more than ten or twelve leaves are allowed to grow on each plant, the remainder being picked off as they appear The leaves are first gathered in February and March, and there is a second but much inferior crop about two months later. If required for chewing they are either dried under a shed, or else pressed into a hollow bamboo (*chunga*) and allowed to ferment. When the tobacco is destined for the pipe, though this is not the use to which it is generally put, the leaves are piled in heaps till they ferment, cut up and mixed with molasses, and then are ready for the hookah. The commonest forms of vegetable grown are spinach *pui* (*basella alba*), *lahi*, a species of *brassica*, different kinds of arums (*kachu*), different kinds of yams (*dioscorea*) and gourds, the country bean *urahi* (*dolichos lablab*), the common mallow *lafa* (*malva verticillata*), the raddish *mula* (*raphanus sativus*), the sorrel *chuka*

sag (*rumex vesicarius*), the brinjal (*solanum melongena*), *palang*, a kind of beet-root, and *dhoniya*, whose seeds and leaves are used for curry. Potatoes are also grown extensively on the churs of the Brahmaputra.

Yield of crops.

The outturn of different crops varies according to the character of the season, and also to a great extent according to the character and level of the soil on which they have been grown. The statement in the margin shows the normal yield per acre laid down by the Agricultural Department after a long series of experiments. These figures only represent a general mean, and even in a normal year there are many fields whose outturn varies largely from the average. The yield of rice, it may be premised, is expressed in terms of husked grain. The prices obtained by the raiyats vary very materially in the different parts of the district and in different seasons. Unhusked paddy sometimes sells at the rate of 60 seers to the rupee, clean white rice sometimes fetches Rs. 2-8 the maund. Mustard generally brings the cultivator from Rs. 2-8 to Rs. 3 per maund.

		lbs.
Sali ...	...	900
Ahu ...	...	800
Bao ...	...	650
Mustard	...	500
Molasses	...	1,800

Area of unsettled waste.

The figures in the margin show the total area of the district, as reported by the Assistant Surveyor-General, Calcutta, the settled area, and the area of reserved forests in 1902-03, and the area of waste land at the disposal of Government in that year. No less than 70 per cent of the

	Square Miles.
Area of the district	.. 3,858
Settled area	... 1,012
Area of reserved forests	... 149
Area of waste land	... 2 697

total area of the district falls in the latter category, but it must not be supposed that the whole of this area is fit for cultivation or human habitation The figures include the area of roads, of tracts that are permanently under water, and of hills. It also includes the area of extensive tracts which are submerged during the rainy season, and are hardly fit for permanent habitation, and of land which is too high or barren to be fit for the growth of food crops. It is useless to attempt to form any estimate of the proportion of the unsettled area in which cultivation could be carried on with profit, and it is hardly necessary to do so, as it is obvious that the district could support a much larger population than it now possesses. The most extensive blocks of waste land in the sadr subdivision are to be found in the Gauhati and Boko tahsils south of the Brahmaputra, which include large areas of unculturable swamps and hills, and in the Tamulpur tahsil near the Himalayas. There is, however, a marked difference in the proportion between cropped and waste land in different parts of the subdivision. In the Gauhati tahsil there are nearly five acres of unsettled waste for every acre cropped, in the Boko tahsil there are over seven, and in Tamulpur there are nearly nine. In Nalbari, on the other hand, it is quite the other way, and there are nearly three acres under crop for every acre waste, in Patidarang there are nearly two, and in Barama, Rangia, and Palasbari the proportions are far from being equal. In the Barpeta subdivision as a whole the proportion of Government waste to cropped land is more than two to one, and in the Paka mauza it is

no less than sixteen to one. A large proportion of this waste land is, however, at present quite unfit for cultivation. Bagribari, Soriha, Uttar Bajali, Pub Bajali, and Manikpur are the mauzas in which there is relatively the smallest quantity of unsettled waste. Table XV A shows the area of unsettled waste in each tahsil or mauza.

General remarks.

Manure is seldom used except for sugarcane, garden crops, and very occasionally for mustard. Agriculture sustained a serious blow after the earthquake of 1897. Much of the best rice land was damaged by deposits of sand, and still more by the silting up of the drainage channels. The area under mustard was materially reduced, and as yet no new crops have been introduced to take its place. The cultivation of jute is extending, but very slowly. Wheat has been tried as an experiment in the Hajo tahsil and the Paka mauza, but it is too early yet to say whether it will be adopted on a commercial scale.

In the submontane tracts the fields are irrigated by water drawn from the hill streams, and this enables the villagers to raise bumper crops from comparatively poor and sandy soil. The following description of these irrigation works is taken from a note by Mr. Barnes, the Settlement Officer :—

"The *modus operandi* in their construction is to dam a stream several miles above the point at which the water-supply is required. The dam is called *bandh*; at the dam a side channel (*muguri*) is left for the passage of boats: from above the dam a channel (*dong*) is constructed to lead the water to the particular area which it is proposed to irrigate. Where water is required for any particular field, a cut (*bolom*) of the requisite depth is made in

the side of the *dong*, and, finally, if there is an excess of water, a channel (*ulta dong*) is made to convey the surplus into some adjacent river. Some of these channels are over seven miles in length, and they are frequently subdivided. In one case one channel is carried across another by a wooden trough. They vary in breadth and depth, but are ordinarily about six feet broad and four feet deep. The total length of irrigation channels in the Bajali tahsil is approximately 50 miles. They are constructed by voluntary labour, any absentee paying Re. 1 to the village common fund. Frequently several villages combine to construct a channel."

The existence of these irrigation works renders the position of the cultivator unusually secure, and this fact is now for the first time being taken into account in the assessment of the district.

Damage done by flood.

Prior to 1897, most of the drainage of the district was collected in the Chaulkhoa river, and was carried into the Manas, and so into the Brahmaputra. For the greater part of its course the Chaulkhoa flows westward parallel to that great river, and it was connected with it by several channels, which carried off the flood water, and allowed the land to dry in time for the sowing of the mustard crop. After the earthquake, the Chaulkhoa, the Saru Manas, and the Kaldiya, two rivers which fall into the Chaulkhoa near Barpeta, were all silted up, and the emergency channels to the Brahmaputra were choked with sand, with the result that the country from the neighbourhood of Hajo to Barpeta became water logged.

Matters began gradually to right themselves as the rivers began to scour away their beds, but progress was naturally slow. The raiyats were, however, induced to combine to re-excavate four channels from the Chaulkhoa to the Brahmaputra, called the Kukuajan, the Phuta

Baralia, the Moamarijan, and the Borsolijan, while the Public Works Department cleared the Chaulkhoa itself, as far as Bijlighat, and a portion of the Kaldiya Further east the Dharmapur mauza was flooded by the water of the Pagla Diya river, which changed it course and came down the Bura Diya. The Public Works Department accordingly turned the river still further east into a channel of the Noa Nadi, which had formed after the earthquake, and conducted it by this route into a *bil* near Bijlighat, from which it escapes into the Chaulkhoa, and so into the Brahmaputra.

The portions of the sadr subdivision which at present suffer most severely from flood are the Dharmapur mauza, the northen portions of Uttar and Dakhin Barkhetri and Ramdia mauzas, and the northern and western portion of Hajo mauza. The whole of this area is one vast sheet of water in the rains, and many of the villages are built on what are virtually small islands. In the Barpeta subdivision the Paka mauza, and a portion of Sarukhetri, Bhawanipur, Dakhin Bajali, Manikpur, and Hastinapur are all exposed to serious floods.

Live stock

Buffaloes.

The buffaloes of the district belong to two distinct breeds, the Assamese and the Bengali. The Assamese are the larger of the two, and are fine upstanding animals with widely spreading horns. During the cold weather they are generally grazed in jungly tracts, and a wild bull often attaches himself to the herd, and becomes the sire of many of the calves. This continual infusion of a good strain of blood does much to maintain the

excellence of the breed. The Bengali buffalo is a smaller and less imposing animal, and does not command so high a price, a bull costing from Rs. 12 to Rs. 25 and a cow from Rs. 20 to Rs. 60. The Assamese or *kacor* animals are more expensive. The *dunosla* or cross breeds from the two main stocks occupy an intermediate position both as regards value and price.

Buffaloes rarely get anything but grass and a little salt to eat. In the cultivated portions of the district they are usually placed in charge of a small half naked boy, whose legs can hardly stretch across the massive back of the animal he bestrides, and who guides it with a nose rope. In the *chaporis* the herd is driven out to graze in the jungle, and follows the lead of the older cows, whose whereabouts is indicated by the metal or wooden bells that are dangling from their necks. They are often trusted to return in the evening of their own accord, and a long line of animals is sometimes to be seen swimming across a channel of the Brahmaputra which separates them from the huts in which the graziers live. Often too, as the sun is setting, a herdsman is to be seen climbing a simul tree, which raises its head above the surrounding wastes of grass, to call his buffaloes home. At night each animal is fastened by a nose rope to a post, and sleeps on the bare ground. The professional graziers are generally Nepalese, and they keep their buffaloes in the *bils* and marshy tracts that fringe the Brahmaputra, or on the high grassy plains at the foot of the Himalaya. A cow is said to remain in milk for about ten months, and yields at the beginning from two to four seers every

day. The amount gradually decreases till a month or so before the next calf comes, when it ceases altogether. The milk is very white and rich in fatty materials, and consequently yields a large proportion of *ghi*. The cows are said to begin breeding when three years old, and to continue doing so for fifteen years, during which time they give birth on the average to about ten calves. The normal life of a buffalo is from 25 to 30 years. Age is judged by the incisor teeth.

Cattle.

Half starved, under sized, ill bred, and not unfrequently diseased, the Assamese cattle are but sorry creatures. The bullocks find it a difficult task to drag even the light native plough, and the cows yield but a minimum of milk. The causes of this degeneracy are not entirely clear, but are probably to be found in a total indifference to laws of breeding, in absolute neglect, and partly, perhaps, in the want of suitable fodder in the rains. No bulls are set aside to be the sires of the herd, and the cows are generally covered by a young and immature animal, who secures the object of his desires by his superior lightness and agility. The sire is often closely related to the dam, and she in her turn has had her strength exhausted by being covered when herself little more than a calf, and by subsequent breeding without the smallest intermission. The cattle are never groomed, and when an epidemic breaks out no attempt is made to isolate the sick. "Everything," as Mr. Darrah* says, "is left to nature, from the moment when the most active, and therefore probably the youngest,

*The information given in these paragraphs is taken from a note compiled by Mr. Darrah, Director of Land Records and Agriculture, in 1887, and from reports received from the Tahsildars and Mauzadars in Kamrup.

bull of the herd has succeeded in covering a cow, until the progeny, after years of work and semi-starvation, dies neglected in some unfrequented jungle." If nasty they have at any rate the merit of being cheap, and cows generally cost from Rs. 8 to Rs. 15, bullocks, which are usually castrated when three years old, from Rs. 10 to Rs. 25. The cattle brought down by the Bhutias in the cold weather are, however, a very different class of animal, and are almost as large as the well known Alderney breed. Unfortunately their numbers are not sufficient to produce any perceptible effect upon the cattle of the district as a whole, and the bullocks do not stand the heat very well.

Goats and sheep and ponies.

The goats are almost as degenerate as the cattle. They yield but little milk, the whole of which is taken by the kids, and are only kept for food or sacrifice. At night they are usually shut up in a small outhouse with a raised floor, which is approached by a slanting board or sloping bamboo platform as a protection against jackals.

Sheep are brought down by the Bhutias in the winter, but, if the figures of the cattle census are correct, the total number in the district is extremely small.

The Bhutia ponies are seldom more than twelve hands high and are shaggy little animals with no manners but considerable staying powers. Thanks to the existence of this breed the country ponies of Kamrup are not quite as miserable creatures as the ones that are usually to be seen in Upper Assam.

The following figures show eth number of animals in the district as ascertained at a census taken in 1899:—Bulls and bullocks 196,000; cows 148,000; bull buffaloes 3,000; cow buffaloes 8,000; young stock 182,000; sheep 82; goats 63,000.

Cattle disease.

The most common forms of cattle disease prevalent in the district are foot and mouth disease, rinderpest (*guti*), a disease called *kachua*, the principal symptoms of which are flatulence and diarrhæa, (*marki*), cholera, *mati-khoa*, the first symptom of which is, as the name implies, the eating of earth followed by dysentery, and *sukuna*, when the animal refuses to eat and dies after ten days or a fortnight.

Grazing.

During the winter cattle are grazed on the stubble left in the fields, on high land that is lying waste, and in swamps and marshes. In the rains they have to be pastured on high land between the rice fields, and in the more densely settled portions of the district there is a dearth of grazing ground. The villagers here either feed their animals on rice straw or on grass brought from a distance, and the poor feeding in the rains has possibly something to do with the miserable condition of the cattle.

Commencement of tea industry.

The tea industry, which bulks so largely in the commercial development of Tezpur and Lakhimpur, is of comparatively small importance in Kamrup. The indigenous tea of Assam was first brought to the notice of Government in 1826 by Mr. C. A. Bruce, a gentleman who had been engaged in trade in the

province while it was still under native rule, and who had been sent up the Brahmaputra in command of a division of gunboats in 1824*. In 1834, a committee was appointed by Government to enquire into the possibility of cultivating tea on a commercial scale, who deputed three of their members, Drs. Wallich, McClelland, and Griffiths, to visit Upper Assam. Nurseries were established, a small establishment was entertained under the general management of Mr. Bruce to search the jungles for plots of indigenous tea and cultivate them when discovered, and plants and seed were brought from China. Tea makers and trained Chinese were imported in 1837, and in the following year some of the manufactured product was sent to England and met with a most favourable reception. Assam tea was regarded as a curiosity, and the first eight chests which were put up to auction fetched sums which at the present day seem little short of fabulous, the prices paid ranging from 16s. to £ 1-14-0 a pound. These were, however, only fancy prices, and a short time afterwards a merchant offered to purchase tea in considerable quantities at prices ranging from 1-10½ d. to 2s. a lb.

Early days in Kamrup.

The pioneer of tea in Kamrup was Mr. W. Robinson, of the Education Department, who has been sometimes called the historian of Assam. In 1853, he took up a small grant

*Information with regard to the early history of the tea industry has been derived from :—

(1) Papers regarding the tea industry in Bengal, Calcutta, 1873.

(2) Selections from the records of the Government of Bengal No. XXXVII papers relating to tea cultivation in Assam, Calcutta, 1861.

(3) Report of the commissioners appointed to enquire into the state and prospect of tea cultivation in Assam, Cachar and Sylhet, Calcutta, 1868.

of 155 acres at Phatasil in the Ramsa pargana, which five years later was said to yield some 12 maunds of tea. There was a general impression that the plant would not do as well in Kamrup as in Upper Assam, an impression which has unfortunately been justified, and Colonel Jenkins' prognostications, that though the shrub might not grow so luxuriantly it would yield sufficient produce to make the cultivation reasonably remunerative, have hardly been fulfilled. The first gardens were opened out on the low hills in the neighbourhood of Gauhati. The situation is extremely picturesque, but the yield is small, as when the jungle is cleared the soil is washed away from the steep slopes and the roots of the bushes are exposed.

Development and decline of the industry.

In 1859 there were ten grants in Kamrup, which covered an area of 12,207 acres, but over 9,000 acres out of this total were included in a single grant held by Mr. Becher at Barduar. It is, moreover, doubtful whether this figure was correct, as in 1872 the Barduar grant was said to contain only 4,737 acres. The area under cultivation was reported to be 297 acres and the yield some 6,000 lbs. of manufactured tea. In the early sixties the industry passed through serious vicissitudes due to over speculation, but it was never at any time of sufficient importance in Kamrup for its success or failure to leave much impression upon the general condition of the district.

In 1872, there were 15 plantations with 1,500 acres of mature plant, which yielded 278,000 lbs. of manufactured

tea. Ten years later there were no less than 101 so called gardens, but most of them were but tiny patches of land, as the total area under mature plant was only 5,286 acres and the yield 951,000 lbs. of tea. The maximum area under mature plant according to the returns was reached in 1889, when 6,057 acres, which were distributed over 89 gardens, yielded 1,164,000 lbs. of tea. From that time onward the industry has steadily declined. The fall in prices rendered it impossible for small gardens, which suffered from special disadvantages of soil, rainfall, and inferiority of plant, to compete with the large estates which had been opened out on more fertile land in other parts of India. In 1900, there were only 22 gardens in the district, with 3,717 acres of mature plant, which yielded 768,000 lbs. of tea. Details for later years will be found in Table VII and for each of the gardens in Appendix A.

Labour supply. The industry is largely worked by local labour, but it has to be supplemented by importation from other parts of India: 2,674 coolies with their dependants were imported in the ten years ending with 1890, and 3,704 in the next decade. In spite of this nearly half of the population censused on the plantations in 1901 (5,828) had been born in the Kamrup district.

Soil. A friable red loam is the soil that proves most suitable for tea. The plant requires a heavy rainfall, but anything in the shape of waterlogging is most prejudicial to its growth, and gardens should only be planted out on land which can be well drained. Land which in its natural state is covered with tree forest is usually con-

sidered the most suitable, as the absence of timber generally shows either that the place is liable to flood, or that the soil is sandy, or that the rainfall is deficient.

Varieties of plant.

Four distinct varieties of wild tea are recognised, Assam indigenous, which has a leaf from 6 to $7\frac{3}{4}$ inches in length by $2\frac{3}{8}$ to $2\frac{7}{8}$ inches in width, Manipur or Burma indigenous with a larger, darker, and coarser leaf than the preceding variety, Lushai or Cachar indigenous, whose mature leaf is from 12 to 14 inches long and from 6 to $7\frac{1}{2}$ inches wide, and the Naga indigenous, which has a long and narrow leaf. In addition to these four varieties there is the China plant, and different kinds of hybrids. The China tea is a squat and bushy shrub with small leaves, which gives a lower yield per acre than the other kinds. It is many years since China seed was planted in new clearances, and considerable areas covered by this plant have been abandoned. In its natural state the indigenous plant attains to the dimensions of a tree, varying from 20 to 50 feet in height, though its girth seldom exceeds two feet. It has a vigorous growth and yields a large outturn of fine flavoured tea, but is delicate when young. Of the hybrid variety there are many qualities ranging from nearly pure indigenous to nearly pure China. A plant with a very small admixture of China is usually preferred, as this imparts the hardiness, the want of which is the one defect in the indigenous variety.

System of cultivation.

The seed is planted in nursery beds in December and January, and kept under shade till the young plants are

three or four inches above the ground. Transplanting goes on between April and July, whenever there is rain, the plants being usually placed from four to five feet apart. During the first two years of their life little more is required than to keep the plantation clear of weeds. By this time the plants are from two to four feet high, and at the end of the rains they are pruned down to fifteen inches or a foot to encourage lateral growth. In the third year the plant can be lightly plucked over, but the yield of leaf is small. Pruning is continued every year, only about two inches are left of the wood formed since the previous pruning and any unhealthy or stunted branches are removed. As an extreme remedy old plants, in which there is a large proportion of gnarled and twisted wood, are sawn off level with the ground, and fresh shoots are allowed to spring from the root itself. During the rains the garden is hoed over several times, in order to render the soil permeable both to rain water and the roots of the bush. At the end of the rains the ground is hoed up to the depth of eight or nine inches. The object of this is to protect the land from drought as the hoed up soil prevents the evaporation of water from the lower strata. It also adds to the fertility of the land by exposing it to air, light, and changes of temperature. Manure has hitherto been little used. Oil cake and cowdung are occasionally spread about the plants, and exhausted land is sometimes top-dressed with rich soil from a neighbouring marsh. The cost of these operations is considerable, and they are not invariably successful from the pecuniary point of view.

Plucking begins in April and is continued till the beginning of December. The bud and the two top leaves are taken from each shoot, but fresh leaves soon appear, and in about five weeks' time the shoot is ready to be plucked again. This throwing out of new leaves is termed a flush, and there are usually five or six full flushes in a season, though each bush is picked over every ten days or so, as the twigs develop at different times. The plucking is usually done by women and children, while the men are engaged in hoeing up the ground around the plants. The plant is liable to be attacked by a large number of pests, the best known being the tea mosquito or blight, the green fly, and the red spider. A full account of these pests will be found in "The Pests and the Blights of the Tea Plant," by Watt and Mann, Calcutta, 1903.

System of manufacture.

When the leaf has been taken to the factory, it is spread out in thin layers on trays and allowed to wither. In fine weather the process takes about 20 hours, but if it is cold and wet from 30 to 40 hours may elapse before the leaf is ready. When the leaf has been properly withered it is placed in the rolling machines. The object of rolling is to break up the cellular matter and liberate the juices, and to give a twist to the leaf. Rolling takes about 40 minutes, and after this the leaf is placed in a cool room for about 3½ hours to ferment. It is then placed on trays in the firing machines, through which hot air is driven, until the last trace of moisture has been expelled, and the tea is crisp to the touch. The leaf is then passed through sieves of varying degrees

of fineness, and the tea sorted into different grades. The best and most expensive quality is called broken orange pekoe and is made from the bud or tip, which contains all the good qualities of tea in a more concentrated form than any of the other leaves, is stronger, and has a more delicate flavour. The other grades, which are differentiated by the size of the mesh through which they pass, are orange pekoe, broken pekoe, souchong, and fannings. After the tea has been sorted it is fired once more to remove any moisture it may have absorbed from the surrounding atmosphere, and is packed in lead lined boxes while it is still warm. Tea loses largely in weight during the process of manufacture and about four pounds of green leaf are required to produce one pound of the finished article.

Green tea. Of recent years an attempt has been made to introduce the manufacture of green tea in order to meet the demands of the American market. In 1902, the Indian Tea Association offered a bounty of 1½ annas on every pound of green tea manufactured. The following year this bounty was reduced by half and over 60,000 pounds of green tea were exported from Kamrup. The principal difference between the manufacture of green and black tea is that the former article is not fermented. As soon as the leaf comes in it is steamed in a drum for about half a minute, a process which turns it a bright green colour, and effectually stops all fermentation. Excess moisture is then removed by a hydro-extractor or centrifugal machine, and it is then rolled, fired, and sorted into the following different

grades—pin head, gunpowder, young hyson, hyson No. I, hyson No. II, twanky and dust. The infused leaf should be of a bright green colour, and the liquor of a very pale yellow shade. Most of this tea is sent to North America, but a small quantity is sold in the midlands counties of England.

Forests.

The forests of Kamrup fall into two main classes, the reserved forests, which in 1902-03 covered an area of 149 square miles, and the unclassed state forests, which in the same year occupied the enormous area of 2,306 square miles. Unclassed state forest is, however, simply Government waste land, and does not necessarily possess any of the characteristics which are usually associated with the expression forest. It may be a sandy *chur*, or a huge expanse of low-lying land covered with high grass and reeds and almost totally destitute of trees. It may be a small piece of arable land which has been resigned by its former holder and has not yet been settled with any other person, or it may be, what its name would naturally suggest, actual tree forest. It is impossible to give even the roughest estimate of the proportion of unclassed state forest which is under timber, but, where the total area is so enormous, it is obvious that, in a country with a heavy rainfall like Assam, the area covered with trees must be considerable.

System of management.

The management of the Government forests is generally entrusted to a Deputy or Assistant Conservator, but the unclassed state forests are under the immediate control of the local revenue officials. Settlement holders are

allowed to remove all minor forest produce, including unreserved trees, which is needed for their own purposes free of royalty.

Reserves and timber trees.

There are altogether 29 reserved forests in Kamrup, but there are only three, the Pantan, Rani, and Barduar, which cover an area of more than ten square miles. The other forests are for the most part isolated hills or other small patches of land covered with sal, and, with the exception of the reserves at Hajo and Darranga, they are all situated south of the Brahmaputra near the outskirts of the Assam range. No detailed description of growing stock has yet been made, but it is thought that about two-fifths of the total area is under sal (*shorea robusta*), and that the remainder consists of equal proportions of green forest, bamboos, and grass jungle. The most valuable timber tree in the district, with the exception of teak, of which there is a small artificial plantation at Kulsi, is sal. Other good trees are sam (*artocarpus chaplasha*), titasapa (*michelia champaca*), ajhar (*lagerstrœmia flos reginæ*), amari (*amoora spectabilis*), gunserai (*cinnamomum glanduliferum*), khakan (*duabanga soneratioides*), makria (*schima molois*), paroli (*stereospermum chelonoides*), koroi (*albizzia procera*) and *labu* (*ficusisoraphii*).

System of working.

Trees which are converted into dugout canoes are generally hollowed out in the forest and carried to the nearest river or dragged to the nearest road and carted. They are then taken to the sale depôts at Loharghat, Kulsi, Boko, and Singra, where they are purchased by local traders, who re-sell them at Goalpara,

or to Bengalis, who take them down to Mymensingh and Dacca. Sleepers and planks are generally sawn up in the forest by hand, but there is one small mill at Barduar. Logs known as *dhums*, which are generally sawn up into lengths of from six to twelve feet, are exported to Bengal for boat building. They are floated down the Kulsi, Batha, Boko and other rivers, but, in the case of sal and other heavy timber, the logs have to be attached to boats, as their specific gravity is greater than that of water.

The principal centres of trade are Kukurmara and Nagarbari for logs, Loharghat, Kulsi, Boko, and Singra for boats, Palasbari for sleepers, and Gauhati for building materials. The deciduous forest is protected, and generally successfully protected, from fire during the dry season. Figures showing the percentage successfully protected and the cost will be found in Table IX, which also contains figures showing the outturn from reserved and unclassed forests and the receipts and expenditure of the Department. There is one artifical plantation maintained by the Department on the Kulsi, where there are 163 acres under rubber (*ficus elastica*) and 300 acres under teak (*tectona grandis*).

List of Forest reserves ten square miles and more in area.

Name of reserve.	Situation and character of soil.	Area in square miles.	Date of constitution.	Route for extraction of produce and market centres.
Pantan ...	Situated on the west bank of the Kulsi river opposite to Barduar reserve in the Bajai mauza of the Chaygaon tahsil. For the most part steep and rugged hills of crystalline rock with a covering of sandy loam. In the valleys a rich loam with vegetable mould on the surface.	34	1878	The timber is extracted by the Kulsi river and taken to Kulsi, Kukurmara, and Palasbari sale depots.
Barduar ...	The reserve is situated on either side of the Kulsi. Throughout the level portion of the reserve the soil is a sandy loam of great depth, and where it is not swampy is well adapted for the growth of sal.	25	Do.	The timber is brought down the Batha and Kulsi rivers to Kukurmara and Palasbari.
Rani ...	The reserve is divided into two blocks situated on the northern face of the Khasi Hills in Rani mauza. Both blocks consist entirely of hills of granitic rock with sandy loam as surface soil. The hills are not precipitous nor are there any surface boulders excepting in some places. The soil is mostly deep and capable of producing a very superior growth of sal.	17	1882	Lines of export.—The Jaglunadi for the southern and western portions of block I, for the rest the Kalmani, Khana, and Bharadu rivers and the Dipar *bil*. The timber is taken to Kukurmara and Palasbari.

CHAPTER V.

INDUSTRIES.

Arts and industries—Weaving—Silk—Pottery—Metal utensils—Mat-making—Lac—Fishing.

Arts and industries.

The arts and industries of Kamrup are not of very much importance as the Assamese have little aptitude for handicrafts. In the days of native rule a certain proportion of the people were compelled to satisfy the varied wants of the Raja and his nobles, but, when the pressure of necessity was removed, they sank back into the great mass of agriculturists from which they were being gradually evolved. Many of the animistic tribes earn the ready cash required to pay their revenue by rearing silk-worms, and much of the clothing that the people wear is woven by the women of the family. A certain quantity of pottery and of brass and bell-metal utensils is turned out; mats are made and lac is grown for export. Blacksmiths forge daos, ploughshares, and knives, and oil is expressed by the bullock mills of Upper India, but, generally speaking, the industries of Kamrup are in a very undeveloped state. Recently a step has been taken in the right direction, and an attempt has been made to work up the raw material of the district locally instead of exporting it in the crude state to Calcutta. Two steam mills have been opened in Gauhati. The larger of the two deals solely with mustard oil, and has a daily outturn of 1,200 gallons. In the other flour is ground

and cotton ginned by steam, and a certain quantity of mustard oil expressed.

Weaving.

The weaving of cotton cloths is carried on by rich and poor alike. Though cotton is grown in the hills of the Province, and though many different dyes are to be found growing in its forests, the material employed is generally imported yarn, which is supplied in the requisite shades by the village shopkeeper. The framework of the loom consists of four stout posts which are driven into the ground so as to make a rectangle about 5 ft. 10 in. by 2 ft. 6 in. and are joined together at the top by cross beams. The implements required for the conversion of raw cotton into cloth and the system of manufacture followed are described in the minutest detail in a "Monograph on the Cotton Fabrics of Assam" published by the Superintendent of Government Printing at Calcutta in 1897. Descriptions of mechanical processes of this nature are, however, at their best unsatisfactory, and are hardly intelligible without a series of diagrams. The total cost of the whole apparatus is about ten rupees, and, as weaving only occupies the leisure moments of the women, the use of home-made clothing helps to save the pocket of the villager. Very little cotton cloth is prepared for sale, and there can be little doubt that weaving as an industry is commercially a failure, the price obtained for the finished article being out of all proportion to the time expended on its production. The principal articles made are *churias* or waistcloths, large sheets or shawls worn as wraps called *chadar* or *bor kapor*, and smaller shawls called *chelengs*. A kind of shawl called

paridia kapor is very finely made, and is enriched with a beautifully embroidered border. It costs sometimes as much as Rs. 200. Of recent years the use of imported clothing has been coming into favour, an innovation which has little to recommend it, as the time formerly spent at the loom is not as a rule assigned to any other useful occupation.

Only two kinds of silk are produced in Kamrup, *eri* and *muga*, as the *pat* worm (*bombyx textor*) is no longer reared. The *muga* worm (*antheroea assama*) is generally fed on the *sum* tree (*machilus odoratissima*). Five different broods are distinguished by vernacular names, but in Kamrup the only broods commonly reared are the *katia* in October—November, and the *jethua* in the spring. The complete cycle of the insect lasts from 54 to 81 days, the bulk of which is occupied by the life of the worm. When the moths hatch out the females are at once attached to straws which are hung up inside the house, and are visited by the males who are allowed to remain at liberty. Each female produces about 250 eggs, which are kept in a dark place, and when the worms appear they are at once transferred to the *sum* tree. A band of straw or plantain leaves is fastened round the trunk to prevent them from descending, and during the night they take shelter under the leaves. Constant vigilance is, however, required to keep off crows, kites, owls, large bats, and other pests which prey upon the worm, and hail and heavy rain not unfrequently do damage. When fully grown the worm is about 5 inches long and nearly as thick as the forefinger. In colour it is green with a brown an yellow

stripe extending down each side, while red moles with bright gold bases are dotted about the surface of the body. When the worms are ready to spin they descend the tree and are then removed to the house. *Muga* silk is chiefly manufactured for home use, and very little is produced for sale. The principal centres of cultivation are Dimaria, Beltala, Panbari, Rani, Barduar, Chaygaon, Pantan, Upper Banbhag, and Patidarang. The silk is reeled from the cocoon, 250 of which yield one oz. of thread. The price obtained is about Rs. 9 per seer.

Eri silk.

The *eri* worm (*attacus ricini*) derives its name from the *eri* or castor oil plant (*ricinus communis*) on which it is usually fed. From five to six broods are usually reared in the year, those which spin their cocoons in November, February, and May yielding most silk. As with the *muga* moth, the females when they emerge are tied to pieces of reed, and are visited by the males who are left at liberty. The eggs are hatched in the house and take from a week to 15 days to mature. As soon as the worms appear they are placed on a tray, which is suspended in a place of safety, and fed on the leaves of the castor oil plant. When fully grown they are about 3½ inches long and of a dirty white or green colour. After the final moulting, the worms are transferred from the tray to forked twigs suspended across a piece of reed, and, when they are ready to spin, are placed on a bundle of dried plantain leaves or withered branches which is hung from the roof of the hut. The matrix of the cocoon is very gummy, and the silk, which is of a dirty white colour, has to be spun, not reeled. Before this is done

the cocoons are softened by boiling them in water and a solution of alkali. Empty cocoons yield about three-quarters of their weight in thread.

Only Brahmans, Ganaks, and Kalitas are actually debarred from the rearing of the *eri* worm, but as a matter of fact the industry is largely in the hands of the animistic tribes, such as the Garos, Mikirs and Kacharis. The principal centres of manufacture are in the Barduar Chaygaon, and Pantan mauzas and the Tamulpur and Barama tahsils, and the most important markets are at Rangia, Barama, Palasbari, and Tamulpur. Large quanities of the cloth are purchased by the Marwari merchants for export to Calcutta.

The most useful garment made of *eri* silk is the *bor kapor*, a large sheet sometimes as much as 20 feet in length by 5 feet wide, which is folded and used as a wrap in the cold weather. It costs from Rs. 10 to Rs. 16. *Eri* cloth is also made into coats and petticoats.

Rough pottery is made by Kumhars, who are often a functional section of the Kalitas, and by Hiras, a section of the Namasudras. There are probably about 7,000 persons in the district who are to a greater or a less degree dependent on the making and selling of earthenware for their means of livelihood, but a large proportion of these people are agriculturists as well. The earth used is generally a glutinous clay, which is well moistened with water and freed from all extraneous substances, and if it is too stiff some clean coarse sand is worked up with

Pottery.

it. A well kneaded lump of clay is then placed on the wheel, which is fixed horizontally and made to rotate rapidly. As the wheel revolves the potter works the clay with his fingers and gives it the desired shape. The vessel is then sun dried, placed in a mould, and beaten into final shape with a mallet, a smooth stone being held the while against the inner surface. It is then again sun dried, the surface is polished, and it is ready for the kiln. The collection of the clay and firewood, the shaping of the utensils on the wheel and the stacking of them in the kiln, form the men's portion of the work. The women do the polishing and the final shaping. The Hiras, however, do not use the wheel, but mould the vessel on a board, laying on the clay in strips, and the whole of this work is entrusted to the women.

The instruments employed are the wheel (*chak*), which is about three feet in diameter and rotates on a piece of hard pointed wood fixed firmly in the ground, the mould (*athali*), a hollow basin about 16 inches long by 3½ inches deep, the mallet (*baliya piteni*) and the polisher (*chaki*).

The principal articles manufactured are cooking pots (*ekathia*, *mola*, *daskathia* and *charu*), water jars (*kalah*, *tekeli* and *thali*), and larger vessels (*hari* and *janga*), with lamps, pipes and drums. Flower pots are manufactured at Gauhati by up-countrymen, and earthenware pipes for ring wells at Barpeta. The profits of the business are said to be small, and the local pottery is being gradually ousted by a superior quality of goods imported from Bengal, and by the metal utensils which are coming extensively into use. The principal centres of the industry

are at Paru, Hirapara (near Palasbari), Rani, Beltala, Durakahara and Khehenipara.

Metal utensils.

The brass and bell-metal industry is not of much importance. Bell-metal utensils are cast in moulds, but brass vessels are made out of thin sheets of that metal, which are beaten out and pieced together. The implements of the trade consist of anvils of different sizes (*belmuri chatuli*), hammers, pincers and chisels. The furnace is simply a hollow in the floor of the hut, and the bellows are made of goat's skin. When it is desired to join two sheets of brass together, nicks are cut in one edge, into which the other edge is fitted, and the two are then beaten flat. A rough paste made of *pan*, a substance which consists of three parts of sheet brass with one part of solder, and borax is then smeared over the join. The metal is heated, the *pan* melts, and the union is complete. The principal articles manufactured are small flattish bowls often used as drinking cups (*lota, bati*), jars for holding water (*kalsi gagari*), trays (*sarai* and *botas*), boxes to carry betel nut and lime (*tema, temi*), and large vessels used for boiling rice (*thali*). The chief centres of the brass industry are at Hajo and Gauhati, and of the bell-metal trade at Sarthaibari. The blacksmith's work is of a very simple character, and they only make ploughshares, billhooks or daos. knives, and sickles. Ornaments of gold filigree of really artistic workmanship and design are manufactured at Barpeta.

Mat making.

Mats are made from bamboo, *nal* (*phragmites roxburg-*

hii), *patidoia* (*maranta dichotoma*), cane (*calamus sp.*), *mutha* (*cyperus rotundus*), and *sola* (*aeschomyne aspera*). Mats made of the first four materials are plaited by hand, but if *mutha* or *sola* is employed strips of the reed are placed in wooden frames and the mat is woven almost as though it were a cloth. Bamboo mats are made in the Gauhati, Palasbari, and Bajali tahsils and cost from As. 2 to As. 8. *Mutha* and pith mats are made in Chamaria, Chaygaon, Hajo, and Patidarang and cost from As. 4 to Rs. 5. Bamboo sieves are also made in Palasbari and Chaygaon and cost from As. 2 to As. 8.

Lac. Most of the lac produced in Kamrup comes from the part of the district which lies south of the Brahmaputra and west of Gauhati. The Garos generally rear their lac on the arhar plant (*cajanus Indicus*), while the Assamese prefer some kind of *ficus* or the *kukursola* (*grewia multiflora*) or *moj* (*albizzia lucida*), but, as far as is known, the quality of the product is not affected by the tree on which the insect has been fed. The method of propagation is as follows. Pieces of stick lac containing living insects are placed in baskets and tied on to the twigs of the tree on which the next crop is to be grown. After a few days the insects crawl on to the young branches and begin to feed and secrete the resin. They are left undisturbed for about six months, and the twigs encrusted with the secretion are then picked off. A good sized tree yields from 30 seers to 2 maunds of stick lac, the best results being obtained from trees of moderate growth, which do not contain too rich a supply of sap. Two crops are generally obtained in the year, the first

being collected in May and June, the second in October and November. The first crop is largely used for seed, and it is the second which supplies the bulk of the exported lac. Ants and the caterpillars of a small moth sometimes do much damage to the insect, and a heavy storm at the time when they are spreading over the tree will destroy them altogether. Almost all the lac produced is exported in the crude form of stick lac. Shellac, when made, is prepared in the following manner. The stick lac is pounded and sifted, and then repeatedly washed and dried to free it from all tinctorial matter. When the desired result has been obtained the resin is put into a bag and heated over a slow fire. The bag is squeezed till the melted lac is forced through the cloth, and it is then scraped off and is ready for the market. Sometimes the raw product is treated by a much simpler process, and the stick lac is merely boiled for some hours and then pressed into cakes, which contain of course the whole of the colouring matter. A dye is also prepared by pounding the stick lac into a fine powder, mixing it with water in the proportion of one to four and boiling it for two hours. The tinctorial matter is then strained off and the refuse, which is known as *shera*, is exported.

Fishing.

The fishing industry is of considerable importance in Kamrup. There are in the district about 21,000 members of the Nadiyal and Namasudra castes who are allowed by custom to catch fish for sale, and probably more than half of these depend to some extent at any rate upon their nets for their means of livelihood. The

right of fishing in the more important rivers and *bils* is every year put up to auction and fetches between twenty and thirty thousand rupees a year. (For details see Table XIV.) There are altogether 145 fisheries in the district, the most valuable mahals being the Brahmaputra, the Chaulkhoa and Baelengi rivers, and the Jahna, Kukurmara, and Janparia *bils* in Barpeta. Fish is not salted in Kamrup, but there is a certain amount of trade in dried fish which goes from the Barpeta and Chenga mauzas to Bengal, and from the country south of the Brahmaputra to the Garo and Khasi Hills The lessees of the Brahmaputra fisheries levy a tax of Rs. 2 or Rs. 3 on each net used, and in the case of large nets like the *langi*, which are worked by several men, a tax of Rs. 3 per annum on each man. The best eating fish are hilsa (*clupea ilisha*), roe (*labeo rohita*), chital (*notopterous chitala*), ari (*arius*), magur (*clarias magur*), and pufta (*callichrous bimaculatus*)

Nets used. The following are the nets most commonly in use:—(1) *Ghakata*, a net in the shape of a shovel which is pushed through the water and is generally used to catch *butchua* fish. (2) *Khewali*, a piece of netting to the centre of which a rope is attached while all round the edges there are weights. The net is thrown flat on to the surface of the water, when the weights sink and drag the sides of the net together. It is then drawn by the rope to a boat or bank. The following names are applied to this net as the mesh decreases in size—*sayani*, *pachani*, *afalia*, *angtha*, *ghanjal*. (3) *Langi*, a large net which is stretched right across a river, the bottom being weighted and the

top buoyed. The fish are then driven towards the net and become entangled in its meshes. The *tenga langi* is a smaller variety, the two ends of which are brought round to form a circle as the net is not long enough to reach across the river. (4) *Parangi*, a square net the opposite corners of which are fastened to flexible bamboos. The net thus hangs like a sack from a stout pole to which the bamboos are attached and is lowered into the water and raised at intervals The *polo* resembles a gigantic wine glass with a short stem made of wicker-work. It is generally used by women, who walk through shallow water and keep pressing the rim of the glass on the mud at the bottom. Any fish that are caught are removed through an opening at the top. The *jutuki* is a smaller kind of *polo*. The *jakai* is a species of wicker-work shovel which like the *polo* is generally used by women. They place the broad end of the shovel on the ground before them, and trample up the mud so as to drive the small fry into it. Conical bamboo traps, which are called *dingaru*, *thupa*, *sepa*, and *gui* and are worked on the principle of the lobster pot, are placed in small streams or running water near the rice fields.

CHAPTER VI.

CONDITION OF PEOPLE—COMMUNICATIONS—TRADE.

Sub-tenancy—Wages—Prices—Food and dress—Dwellings—Economic condition of the people—Conventional restrictions—Development of steam navigation—Railways—Roads—Water communications—Post and telegraph—Trade—Fairs—Towns—Local Boards.

Sub-tenancy. There are large *nisfi-khiraj* and *lakhiraj** estates in Kamrup, and the area of land sublet is considerably larger than it is in the upper districts of the valley. At the last settlement statistics of sub-tenancy were collected for nearly nine-tenths of the total settled area; and it was found that nearly 25 per cent of the land with regard to which information was recorded, was occupied by tenants. The proportion returned for each of the groups into which the district was divided is shown in the statement in the margin. No rent law has as yet been introduced, as it is thought that in a comparatively sparsely peopled district like Kamrup there is not much danger of rack renting. Rents are paid either in cash or kind, or by a

	Per cent.
Bajali	... 28
Bangsa	... 36
Barbhag	... 30
Barpeta	... 10
Baska	... 14
Bijni	... 8
Chamaria	... 3
Patidarang	... 35
Ramdia Chapari	... 7
South Bank	... 20

* *Nisfi-khiraj* estates pay half the ordinary rates of revenue, *lakhiraj* estates are revenue free. The history of these estates will be found in Chapter VII.

combination of the two systems. Of grain rents there are several varieties. Tenants holding land on the *adhi* tenure hand their landlord half the actual produce of the fields; whereas, in the case of *chukti adhi*, a fixed quantity of grain is given irrespective of the total yield. Sometimes the crop is divided before it is threshed (*dal adhi*), sometimes after (*guri adhi*). In the case of cash rents the Government revenue is the rate ordinarily charged, but the land is usually measured up with a rod that is only 7½ or 7 cubits in length instead of the standard measurement of 8 cubits. This in itself gives the landlord a profit of 5 or 30 per cent, and, in addition to this, he often either levies cesses on his tenants, or requires them to work for a certain time in his own fields. Typical cesses are *salami* from 8 annas to Rs. 2; camp expenditure 6 annas; and contributions towards the cost of weddings or pujas.

Wages.

The ordinary daily wage is said to be four or five annas a day. There is no regular landless labouring class, but since the earthquake of 1897 it is not so difficult to obtain labour as it was. Ploughmen are sometimes paid in grain, and sometimes are allowed to use their employers' bullocks in their own fields for one day out of every three. The villagers often combine to help one another to get in the harvest, the owner of the field rewarding his assistants by a good meal. Servants hired by the month receive from Re. 1 to Rs. 7 as wages. In many cases these men are what is known as *bandhas*. A man who is in need of ready cash receives a lump sum down, and enters into an agreement to work for his creditor till the full amount

has been redeemed. He is fed and clothed, and each year's labour is usually set against a certain portion of the advance. Occasionally it is only set against the interest, and, where this is the case, the loan can never be worked off. These *bandhas* are usually very kindly treated, and it is obvious that, if they choose to leave their masters, a civil suit for the balance of the sum due affords a very insufficient remedy, as such a person is not likely to have any property from which it would be possible to satisfy the civil court's decree.

Prices. From the figures in the margin, which show the price of common rice at Gauhati in certain selected years since 1863, it will be seen that, though there has been a general tendency towards a rise in price, it has not been very marked and has been subject to striking variations. The average price recorded for each of the four decades ending with 1902 was 17·3; 15·5; 16; and 12·5 seers for a rupee. The high average during the last decade was largely due to famine in India and several poor harvests in Kamrup. The prices obtained by the raiyats for their surplus produce vary very considerably in different parts of the district. At Rangia, the price paid for ordinary white rice seldom falls below Rs. 2 per maund, even at harvest time, but in less accessible localities the price is sometimes very low. In Bajali, unhusked rice sells at about 40 to 45 seers for the rupee on the river bank near the trader's boat; but the price falls in direct proportion to the distance from which

Year.	Seers per rupee.
1863	23
1866	12
1872	23
1879	11
1888	20
1897	9
1900	16

the boatmen have to carry the grain. In some villages the rate is as low as 60 seers for the rupee and occasionally even less than this, but the owners could always obtain the higher price if they chose to carry their produce down to the boats themselves. Prices such as these are low enough, but the profits of the boatmen, who purchase the rice in the mofussil and sell it again in Barpeta or Gauhati, do not appear to be excessive.

Mustard generally brings the raiyat about Rs. 3 per maund. The price of salt has fallen during the last quarter of a century, and so has that of pulse, though not to a very marked degree. Table X shows the price of common rice, pulse, and salt recorded at Barpeta and Gauhati in 1880, 1890, 1900, and subsequent years.

Food. The staple food of the people is boiled rice, eaten with pulse, spices, and fish or vegetable curry Amongst the well-to-do, pigeon or duck occasionally take the place of fish, but fish is a very common article of diet, and is said to be a substitute for *ghi* which is not very largely used. Goats' flesh is eaten by Muhammadans and members of the Saktist sect, and venison is always acceptable, and is frequently procurable, especially in times of flood, when the deer are driven on to islets of higher land and are ruthlessly slaughtered from boats. Tea drinking is very common, especially in the early morning. Sweetmeats usually consist of powdered grain mixed with milk, sugar, and *ghi*.

Dress. The ordinary form of dress for a villager is a cotton *dhoti* or waistcloth, with a big shawl or wrapper, and

sometimes a cotton coat or waistcoat. Women wear a petticoat, a scarf tied round the bust, and a shawl. These clothes used originally to be all home made, but of recent years imported fabrics have been largely coming into favour. Cheap woollen blankets are also worn in the cold weather, a fashion that has much to recommend it as the Assamese are often very lightly clad in winter. Silk is not as generally worn as in Upper Assam, and the women do not seem to have as much jewellery as their sisters in Sibsagar. Boots and shoes are the exception, and in their own homes even well-to-do people wear wooden clogs. Wooden sandals are also used by villagers when travelling or working in jungle ground, where there are tufts of sharp-pointed grass.

Dwellings. The house of the ordinary villager consists of three or four small and ill-ventilated rooms, built round three sides of a court-yard. The walls are usually made of reeds plastered over with mud, the roof of thatch supported on bamboos, the floor of mud. In Kamrup, the enclosure is often entered through a little room intended for the reception of guests, a refinement which is seldom seen in the homestead of the ordinary villager further up the valley. The materials required for the construction of a house do not, as a rule, cost the proprietor anything but the labour of procuring them ; but the houses are small and generally badly built. The furniture of the cultivating classes is simple, and consists of a few boxes and wicker-work stools, brass and bell-metal cooking utensils, earthen pots and pans, baskets and bottles, and perhaps a loom. The villager sometimes sleeps on a

small bamboo *machan* or platform, sometimes on a mat on the floor, but the middle classes have beds, tables, and chairs in their houses.

Economic condition of the people.

The local revenue officials are of opinion that a considerable proportion of the people are in debt; but it is doubtful whether this indebtedness is serious, as, apart from the standing crop, the poorer raiyats have no security to offer. The rate of interest charged is said to vary from 10 to 75 per cent, but for small loans it is generally either one anna or two pice in the rupee per mensem. The Settlement Officer (Mr. Barnes) seems to be of opinion that there is little genuine poverty in Kamrup. Of the Bajali group, which is certainly not the richest part of the district, he says that, though the ordinary raiyat is poor, he is able to maintain himself on his land in independance and without difficulty. Cash is generally scarce and little grain is stored, but this is hardly matter for surprise as the people seem to take life fairly easily. Of the Barbhag group, which has a density of 521 to the square mile, the Settlement Officer writes as follows:—" The landlords are on the whole fairly well off, though there are very few wealthy men amongst them. They were undoubtedly rather hard hit by the sudden rise in the demand in 1893-94, though they can well afford to pay. The Brahmans and Ganaks have other sources of income besides agriculture. The independent cultivators in the good villages are generally well off but without much money. In the bad villages they are distinctly poor, and have generally come down in the world owing to the deterioration of their land. They spend large sums

on marriage; a Brahman's marriage is said to cost between Rs. 1,000 and Rs. 1,200 and that of a Sudra not less than Rs. 200. A certain amount of debt is the result." In the south of the Patidarang group the conditions are said to be much the same as those in the Barbhag group, but in the north of Panduri, the south of Kaurbaha, and the north of Pub Kachari Mahal the raiyats are described as "distinctly poor." The people obtain the cash they require to pay their land revenue by the sale of surplus dhan, mustard, and pulse, garden produce, *eri* cloth and thread, and lac. The Brahmans earn considerable sums by going to Bengal as priests, and at the other end of the social scale are the Kacharis, who earn almost as much by working on the tea gardens. A certain number of people work on the roads for the Public Works Department or the Local Board, while others hollow out canoes for sale. The villagers are, however, probably not so well to do as those of Upper Assam, where the tea industry puts an enormous amount of cash into circulation. On the other hand they spend much less on opium. Silk is not as generally worn as in Sibsagar, and the women do not own much valuable jewellery.

Conventional restrictions.

The inhabitants of Kamrup are not encumbered by many conventional restrictions. All castes catch fish for their own consumption, but only the Doms or Nadiyals, the Charals or Namasudras, and the animistic tribes of Bodo origin will sell it. Brahmans, Ganaks, and Kayasthas decline to cultivate the *eri* worm; but, apart from this, there are few restrictions imposed by caste

which are not common to the rest of India. All over the district, Hindus decline to touch the plough on the last day of the month, the day of the new moon, and the day when the moon is eleven days old; and here and there certain days in the week are considered to be inauspicious. In Rangia tahsil, for instance, a Tuesday or a Saturday is thought to be the appropriate day on which to begin ploughing or to sow summer rice; but they are the only two days in the week on which *sali* dhan must not be sown, and in the Nalbari tahsil they are close days as far as house building is concerned. In the Bajali tahsil the restrictions seem to be vexatiously minute. *Sali* dhan must not be sold on Mondays and Thursdays, and revenue is not paid on those days. *Ahu* dhan is not sold, or even given away, on Saturdays and Tuesdays; and Sunday and Monday are days on which no prudent person would plough his fields or sow the seed.

Communications.

At the time when we first came into possession of the Province, the difficulty of communications proved a most serious obstacle to its development. The Brahmaputra was the great highway which connected this portion of the Company's dominions with Bengal, but the journey up the river for any boat of ordinary size was a very lengthy business. McCosh, writing in 1837, stated that a large boat took from six to seven weeks to come from Calcutta to Gauhati, though the post, which was conveyed in small canoes rowed by two men, who were relieved every fifteen or twenty miles, reached Gauhati in ten days.*

* Topography of Assam—pages 9 & 82.

Beginning of steam navigation.

This was the state of things for twenty-two years after our annexation of the valley, but in 1848, the Government steamers were deputed to ply between Calcutta and Gauhati. Three years later, the Commissioner, Major Jenkins, made the not unreasonable proposal that three or four times a year they should be allowed to proceed right up the valley to Dibrugarh. His suggestions were negatived by the Marine Department, on the ground that the voyages would be financially a failure, but his views were strongly urged on Government by Mr. Mills, when he visited the Province in 1853. The proposal met with the approval of the Lieutenant-Governor, instructions were issued for the despatch of a steamer in that year, and several voyages were made, with results that were not unsatisfactory even from the financial point of view. The journey from Gauhati to Dibrugarh and back occupied no more than fifteen days, an extraordinary contrast to the interminable delay of the same voyage in a country boat. The cargo tendered soon exceeded the carrying capacity of the steamers, and in 1855 Lieutenant-Colonel Jenkins complained that the vessels reached Gauhati fully laden with goods shipped in Upper Assam, so that Gauhati and the ports below derived practically no advantage from the downward service of the steamers.

As was only to be expected, the rates at first charged were fairly high, and a ticket from Calcutta to Gauhati cost no less than Rs. 150. On the other hand, the accommodation was designed on a very liberal scale. The regulations issued in 1851 expressly authorised

passengers to carry pianos in their cabins free of freight, provided that they were required for use during the voyage and were not in packing cases; a proviso which suggests a very deliberate voyage as compared with the speedier travelling of the twentieth century. Freight on ordinary stores seems to have been charged at the rate of one rupee per cubic foot between Calcutta and Gauhati, but for some time longer a great part of the trade of the Province continued to go by country boat. The planters could never count on being able to despatch their tea by steamer, and were thus compelled to keep up an establishment of country boats, and having got the boats to use them, and the same objection held good in the case of native merchants.* The cost of working the line was heavy, but, in spite of this, it showed a fair profit, and it was evident that there would be a great development of the traffic if only facilities were provided for it.

Private steamers put on the river.

In 1860, the Indian General Steam Navigation Company entered into a contract to run a pair of vessels every six weeks, provided that the Government boats were taken from the line. Since that date the steam navigation of the Assam Valley has been in the hands of this Company, and the River Steam Navigation Company, with whom they are associated. But in spite of the existence of a regular service, and the quickening effects of private enterprise, travelling still continued to be very slow. The steamers did not profess to run to scheduled time, the delay at the larger ports for the

* Memorandum by the Director of Public Instruction, Bengal, dated the 7th February 1867.

loading and unloading of cargo was considerable, and the passenger no doubt often required his piano to beguile the tedium of the way. In 1861, the Commissioner, Colonel Hopkinson, was disposed to take a gloomy view of the condition of affairs, and, in a letter to Government, openly gave expression to the opinion that it would be better to compensate the planters for any loss they might sustain, and abandon the Province, unless Government were prepared to enter upon a course of vigorous material improvement. In the same letter, he drew the following dreary picture of the isolation of Assam :—

"With the furious current of the Brahmaputra, still unconquered by steam, opposing a barrier to all access from without, and not a single road fit for wheeled carriage, or even passable at all for a great portion of the year, there is such an absence of the full tide of life running through Assam, such a want of intercourse between man and man, as does and must result in apathy, stagnation, and torpidity, and a terrible sense of isolation, by which enterprise is chilled and capital and adventurers scared away. The profits of tea cultivation should attract hundreds where tens now come, but the capitalist is not always to be found who will venture his money in a country to which access is so difficult as it is to Assam, through which his correspondence travels at the rate of a mile and a half an hour, and in which it may take a month to accomplish a journey of two or three hundred miles; nor, on the other hand, is it every spirit, however bold, that cares to encounter so dreary a banishment, and to be so entirely cut off from his fellows in a place from which exit is only possible at rare intervals, and must be so literally a prison or tomb to him."

The daily mail service.

Matters, however, gradually improved, and in 1884, a daily service of mail steamers was started between Dibrugarh and Dhubri, connecting with a steamer which plied between the latter place and Jatrapur.

Here the traveller who was pressed for time could take the train to Calcutta, though the line was not of the most comfortable, as more than one river had to be crossed in boats before the capital of Bengal was reached.

The introduction of a daily steamer service represented an enormous advance in the facilities for communication between Assam and the outer world. The large steamers were not uncomfortable, but progress was slow, and not only the hour, but the date on which they left any given port was far from certain. The would-be traveller could not choose his own time for starting on his journey, but had to select a date on which a steamer was expected at the nearest ghat, and even then he not unfrequently had to endure a weary period of waiting by the river bank. The daily service changed all that and combined the advantages of regularity with a speed which, in comparison with that attained by the large cargo boats, was most commendable.

The ports of call in Kamrup are Kholabanda for Barpeta, Palasbari, Soalkuchi, and Gauhati itself.

At the present day (1905) two steamers ply daily between Gauhati and Dhubri. One, which carries the mails, does not call at any of the intermediate ports and is supposed to do the up journey in twenty hours and the down in eleven. The other belongs to the service which runs between Goalundo and Dibrugarh and calls at each of the ghats mentioned above.

The Railway.

The Gauhati branch of the Assam-Bengal Railway runs for a distance of 33½ miles through the district, eastward

to the boundary of Nowgong. There are stations at Panikhaiti, Digru, and Khetri, but, as this portion of the district consists to a great extent of hills and marshes, it has not been much affected by the opening of the line. A line is now (1905) under construction from the north bank of the Brahmaputra opposite Pandughat, which will connect with the Eastern Bengal State Railway. On its completion there will be through railway communication, not only between Calcutta and Gauhati, but between Calcutta and Dibrugarh, though the Ganges and the Brahmaputra will still have to be crossed by ferries.

The roads on the south bank.

South of the Brahmaputra, the main artery of communication is the great trunk road, which runs the whole length of the valley from Fakirganj opposite Dhubri to Saikhoa opposite Sadiya. It enters Kamrup from Goalpara at the 48th mile and runs northward and eastward till it reaches the river at Palasbari. From Gauhati it turns southwards, and for eleven miles is a section of the Gauhati-Shillong road, but it then bends again sharply to the east, and enters the Nowgong district near Nakhola. There are inspection bungalows at Dhupdara (in the Goalpara district) 49 miles, Boko 37 miles, Chaygaon 26 miles, and Palasbari 15 miles west of Gauhati, and at Amrigog 9 and Sonapur 19 miles east of that town.

The only other roads of any importance south of the Brahmaputra are the road which runs eastward from Gauhati to Sonapur, and the roads connecting Barduar with Chaygaon, Palasbari (13½ miles), and the trunk road at a point 9 miles from Gauhati (19 miles).

The roads on the north bank.

The north trunk road enters the district from Goalpara at Raha, and leaves it at Dumnichauki, where the Barnadi forms the boundary between Kamrup and Mangaldai. There are inspection bungalows at the following places, going from west to east; the figures in brackets indicate the length of the stage. Raha, Halapakri (6½ miles), Bhawanipur (9¼ miles), Patacharkuchi (13 miles), Barama (7½ miles), Nalbari (8½ miles), Rangia (11½ miles), Kamalpur (8 miles), Dumnichauki (8¾ miles). From North Gauhati three roads run, to Dumnichauki, to Naokata, and to Nalbari. On the Naokata road there are inspection bungalows at Chutiapara (9 miles), Sutargao (10 miles), and Naokata (15 miles). On the Nalbari road there is an inspection bungalow at Hajo (14 miles), from which point it is 18 miles to Nalbari. The section between Hajo and Nalbari was injured by the earthquake of 1897, and there are places which are at present (1905) unfit for wheeled traffic in the rains. From Rangia a road runs to Darranga (26 miles), and from there there is a difficult footpath to the frontier village of Dewangiri, and a rough driving track to Subankhata. From Barama a road runs eastward to the boundary of Mangaldai, 29 miles away, passing Tamulpur, where there is an inspection bungalow, on the 17th mile. The Chapaguri mauza is tapped by a road which runs from Patacharkuchi to Kakilabari, where there is an inspection bungalow on the 16th mile. The roads and tracks in the western portion of the district can best be understood by a reference to the map which accompanies this volume. Most of the minor streams are

spanned by bridges, but there are no less than 45 ferries in the district which are still maintained across the larger rivers. With the exception of a section of the trunk road west and south of Gauhati, all of these roads are unmetalled, and are liable to be much cut up if asked to carry heavy traffic in the rainy season. In 1903-04 there were altogether 547 miles of cart road and tracks maintained either by the Local Boards or the Public Works Department in Kamrup.

Navigable rivers.

In the rainy season the rivers of the district are largely used for the removal of grain and other produce from the interior. The following statement shows in a concise form the principal rivers used as trade routes, and the extent to which they can be so used in the wet and dry season: —

Names of rivers.	Highest point to which a boat of 4 tons burthen can proceed in the	
	Cold weather.	Rains.
Alga	Not navigable ...	Throughout.
Baralia	25 miles up from its junction with the Chaulkhoa.	Do.
Barnadi	Mukaldanga ...	Mukaldanga.
Beki	Not navigable ...	Throughout.
Chaulkhoa	Do. ...	Do.
Deojara	Do. ...	Do.
Digru	Barnihat	Barnihat.
Kalajal	Not navigable ...	Jatiabhanga.
Kaldiya	Do.	Throughout.
Kulsi	Kukurmara ...	Ukiam.
Manas	Bogidara	Matharguri.
Pagladiya	Not navigable ...	Alagjhar.
Palla	Do.	Throughout.
Pamara	Do.	Do.
Pathimari Barnadi ...	Tamulpur	Tamulpur.
Sessa or Newnadi ...	Not navigable ...	Kamalpur.
Tihu	Do.	Throughout.

Large country boats come up the Brahmaputra to Gauhati, but only a comparatively small number proceed above that town.

Post and Telegraph.

The following abstract shows the development in postal business which has occurred during the past forty years:—

Number of post offices in		Number of letters and post cards (delivered in omitted thousands).			Number of Savings Bank accounts in		Balance at the credit of the depositors.
1875-76	1903-04	1861-62	1870-71	1903-04.	1871-72	1903-04	1903-04.
							Rs.
6	28	43	150	393	11	1,397	2,42,000

The mails from Calcutta are at present carried by steamer from Dhubri, and are dropped at Kholabanda ghat for Barpeta, and at Gauhati. A list of the post and telegraph offices in the district will be found in the appendix (Statement B).

Commerce and Trade.

The wealthiest and most important traders in Kamrup are the shrewd Marwari merchants, locally known as Kaiyas. Most of the import trade is in their hands, and they bring up from Calcutta piece goods, clothes and blankets, grain and pulse of various kinds, salt, oil, *ghi*, cement, corrugated iron, metal utensils, and thread. The chief exports of the district are mustard seed, lac, unhusked rice, hides, and timber. The Kaiyas are the principal exporters of the district, but in the Barpeta subdivision, the wits of the people seem to have been sharpened by the unpleasant character of their surroundings.

The Assamese traders of this quarter are not content with buying up the mustard crop in the vicinity, but they extend their operations to Upper Assam, and in the rains their boats are to be found as far east as the Majuli.

Gauhati and Barpeta are the most important trading centres. The number of shops owned by Marwaris in the interior is not so large as it is in Upper Assam; and the village shopkeeper, who retails salt and oil from a small grass hut, is generally a much less important person than the Kaiya. The principal trading villages are Palasbari, Nalbari, Hajo, and Rangia. A list of all the villages in which there are three or more permanent shops will be found in the appendix (Statement C). A good deal of business in also transacted at the *hats* or markets where the raiyats meet on certain days in the week to exchange the products of their farms A list of these markets will be found in the appendix (Statement D).

Bhutia fairs. Trans-frontier trade is carried on with Bhutan at Darranga and Subankhata. The sites of these frontier fairs are picturesque enough. Immediately to the north are the tumbled masses of the Bhutan Hills, whose outer ranges, unlike the mountains of Upper Assam, are singularly destitute of forest. The plain is for the most part covered with short turf, dotted over here and there with patches of high grass and an occasional khair tree. There are no villages in the vicinity, but every winter grass huts are built for the occupation of the Marwari merchants and the traders from Barpeta who fre-

quent the place. The Bhutias come down in considerable numbers with lac, wax, chillies, blankets, ponies, donkeys, and goats. They sell these things to the traders, and with the proceeds buy cotton thread and cloth, rice, *eri* cloth and thread, and brass vessels. In the latter articles there is a considerable trade, and Morias come from Gauhati to manufacture the large brass cans which the Bhutias use to distil their country spirit. The trade is generally transacted on a cash basis, though the hillmen sometimes barter salt and chillies for rice; the usual rate of exchange being three or four baskets of rice for one of salt, and two of rice for one of chillies. Starting from these centres, the Bhutias travel about the country and traffic with the villagers and the traders in the interior. The big stout men, with their dirty rather insolent looking faces, and their layers of filthy clothing, are a common sight in Kamrup in the cold weather, as they march about the roads with huge baskets of merchandise on their backs, and strings of shaggy little mules, donkeys, and ponies.

The other fairs held in the district are not at present of very much importance. A list of the places where these fairs are held will be found in the appendix (Statement E). Most of them are connected with some religious festival.

Municipalities. Gauhati.

Gauhati town (Goa-hathi=high land covered with areca-nut trees) is situated on the left bank of the Brahmaputra river in 26°11′ N. and 91°45′ E. It lies on the trunk road from Bengal to Sadiya, and is at present the terminus of the Assam Valley Branch of the Assam-

Bengal Railway, though a line is under construction along the north bank of the Brahmaputra, which will connect it by rail with Calcutta. An excellent metalled road runs from the steamer ghat to Shillong, the head-quarters of the Local Administration.

A steam ferry crosses the Brahmaputra at this point, and the place is a port of call for the river steamers. The town is growing very slowly, and the population in 1872, 1881, 1891, and 1901 was 11,492, 11,695, 8,283, and 11,661 respectively. The figures for the two earlier years include the population of North Gauhati. The population of North and South Gauhati in 1901 was 14,244. The bulk of the population, as in most of the towns of Assam, is composed of foreigners. Modern Gauhati is identified with Pragjyotishpur, the capital of king Bhagadatta, who is mentioned in the Mahabharata; and when Kamrup was conquered by the Ahoms it became the residence of the viceroy of Lower Assam. The extensive earthworks which protect it on the land side, the numerous large tanks, and the brick and masonry remains which are found in every direction beneath the soil, all clearly show that the place was originally an important city with a considerable population, which occupied both banks of the Brahmaputra. The town which lies on the north of the river is said to have been built by the Koch king Parikshit, who flourished at the end of the sixteenth century; and at the time of Mir Jumla's invasion Gauhati is described as lying north of the Brahmaputra.* By the end of the eighteenth century it had

* *Vide* J. A. S. B. No. I, Part I, 1872, p. 69.

fallen from its high estate, and Buchanan Hamilton, writing in 1809, describes it as a "very poor place." From 1826, when Assam was ceded to the British, till 1874, when the Province was separated from Bengal, Gauhati was the seat of the Local Government, and it is still the headquarters of the Commissioner and of the Judge of the Assam Valley districts, as well as of the ordinary district staff. The most noteworthy event in its recent history was the earthquake of 1897, which destroyed all the Government offices and wrecked every masonry building in the place. The town has since been re-built, and hardly any traces are now to be seen of this great catastrophe. The situation of Gauhati is extremely picturesque. To the south it is surrounded by a semicircle of thickly-wooded hills, while in front rolls the mighty Brahmaputra, which during the rains is more than a mile across. In the centre of the stream lies a rocky island, the further bank is fringed with graceful palms, and the view is again shut in by ranges of low hills. Such a site, though beautiful, is far from healthy, and at one time the mortality in the town was very high. Improvements in the drainage and water-supply have done much to remedy this defect, but owing to its sheltered situation and the comparatively low rainfall (67 inches) the climate in summer is rather oppressive.

Gauhati was constituted a municipality, under Act V (B.C.) of 1876, in 1878; and Act III (B.C.) of 1884 was subsequently introduced in 1887. The town has an area of 2·95 square miles, and in addition to the Shillong-Gauhati cart road, which is maintained by the Public

Works Department, there are 14 miles of road kept up by the municipality, of which 9½ are metalled. There are ten members of the Municipal Committee, six of whom are elected, and up to date the Deputy Commissioner has always filled the post of Chairman. The principal taxes are a tax of 7½ per cent on the annual value of holdings, a latrine tax, and a water rate. The average municipal receipts and expenditure in the ten years ending with 1903 were Rs. 43,000, the chief sources of income being taxes on houses and lands (Rs. 6,500), water rate (Rs. 8,200), revenue from markets and slaughter houses (Rs. 5,500), and contribution (Rs. 10,100). The chief items of expenditure were water-supply (Rs. 13,000) conservancy Rs. (11,800), and public works (Rs. 7,400). The water-supply is pumped from the Brahmaputra, passed through filtering beds and distributed through standpipes all over the town. Since the completion of these works in 1887, cholera, which used to be very prevalent, has almost disappeared. The present source of intake is, however, situated in the centre of the town, and in a dry season is liable to be landlocked. A large sum has accordingly been sanctioned for the removal of the pumping station and filtering beds to a point above the town. Gauhati is the principal centre of trade in Lower Assam.

Barpeta. Barpeta was formed into a municipality under Act V B. C. of 1876 in 1886. The committee consists of seven gentlemen nominated by Government under the presidency of the Subdivisional Officer. The principal tax levied is a cess at the rate of 5½ per cent on the annual value of holdings; but considerably more than half the ordinary

income is derived from a grant made by Government, and from the fees levied on pounds, markets, and ferries. The actual incidence of taxation in 1903-04 was only As. 6-3 per head. The inhabitants of the town resent having to pay even this small sum, and have more than once petitioned for the abolition of the municipality. The area of the town is 1·37 square miles, and there are nearly 15 miles of road within municipal limits, but none of these roads are metalled. There is no attempt made to light the town and, though there are seven masonry wells, the inhabitants for the most part draw their water from small wells sunk inside their compounds. Barpeta is chiefly famous for the great Mahapurushia *sattra* founded by the Vaishnavite reformer Sankar Deb at the end of the fifteenth century. The ground surrounding the *sattra* is considered holy, and is crowded with huts huddled together in the most insanitary propinquity. The Mahapurushias have strong religious prejudices against vaccination, and when small-pox breaks out, it rages with exceptional severity, an epidemic which occurred in 1895, causing a mortality of 36 per mile from this disease alone. It is thus no matter for surprise that the population of the town does not increase; and, though the birth-rate is unusually high, the population, which in 1881 was 11,332, fell at each successive census, and in 1901 was only 8,747. The town was at all times liable to flood, and since the earthquake of 1897, most of it goes under water in the rains. It is the headquarters of the Subdivisional Officer, and the public buildings include a hospital, court

police station, and high school. The manufactures are not of much importance and chiefly consist of canoes, earthenware well rings and other pottery, and really artistic gold filigree work. There is, however, a considerable trade in rice, pulse, and mustard, and the merchants of Barpeta extend their operations as far as the Majuli in Sibsagar.

There are no other places in the district which can be dignified by the name of town.

Local Board's History.

In the early day of British administration there was little money available for public works of any kind, and what there was was generally expended under the control of the Public Works Department or the District Magistrate.

In 1872, the management of the district roads was entrusted to a committee presided over by the Deputy Commissioner. The funds at their disposal were partly obtained from tolls and ferries on local roads and other miscellaneous sources, but principally from grants made by the Bengal Government from the amalgamated district road fund. In 1874, when Assam was erected into a separate administration, the Government of India assigned one-seventeenth of the net land revenue for local purposes. The district improvement fund was then started, and the administration of its resources was, as before, entrusted to the Deputy Commissioner assisted by a committee. The actual amount placed at their disposal was not large, and in 1875-76 the total income of the district funds of the Province was only Rs. 1,85,000,

which was a small sum in comparison with the twelve and a half lakhs of rupees received by the Local Boards in 1903-04. In 1879, a regulation was passed providing for the levy of a local rate, and the appointment of a committee in each district to control the expenditure on roads, primary education, and the district post. Three years later the district committees were abolished by executive order, and their place was taken by boards established in each subdivision, which are the local authorities in existence at the present day. The Deputy Commissioner is Chairman of the board of the headquarters subdivision; the Barpeta board is presided over by the Subdivisional Officer.

Functions.

The Local Boards are entrusted with the maintenance of all roads within their jurisdiction, with the exception of the two trunk roads and the road from Barpeta to the steamer ghat, the provision and maintenance of local staging bungalows and dispensaries, and the supervision of village sanitation, vaccination, and the district post. They are also in charge of primary education, subject to the general control of the Education Department, and are empowered to make grants-in-aid to schools of higher grade, subject to certain rules. For these purposes, they have placed at their disposal the rate which is levied under the Assam Local Rates Regulation of 1879, at the rate of one anna per rupee on the annual value of lands, as well as the surplus income of pounds and ferries, and some minor receipts. The principal heads of income and expenditure are shown in Table XVII. The annual budgets of

the Boards are submitted to the Commissioner for sanction. The estimates for all works costing Rs. 500 or over must be submitted to the Public Works Department for approval, and important works, requiring much professional skill, are made over for execution to that department. Less important works are entrusted to the board overseers.

The following statement shows the constitution of the Local Boards in the district, and the mileage of cart roads maintained by them in 1901.

Name.	Area in square miles.	Population.	MEMBERS.					Mileage of cart roads.
			Total number.	European.	Native.	Official.	Elected.	
Gauhati ...	2,584	473,252	18	5	13	5	13	262
Barpeta ...	1,274	115,235	7	·6	7	1	·6	118

CHAPTER VII.

GENERAL ADMINISTRATION.

Land revenue—Native system—Early British settlements—The settlement of 1893—The settlement of 1903—Established and fluctuating cultivation—Annual and periodic leases—Settlement staff—Land tenures—Collection of land revenue—Unsettled waste—Excise—Opium—Country spirit—Laopani—Ganja—Income tax—Stamps—Public Works—Administration of justice—Volunteering—Police—Jail—Education—Medical aspects—Surveys.

Land Revenue. Native system.

The system in force under the Ahom kings was one of personal service. The whole of the adult male population was divided into bodies of three men called *gots*, each individual being styled a *paik*. One *paik* out of the three was always engaged on labour for the state, and while so employed was supported by the remaining members of his *got*. In return for his labour each *paik* was allowed 8 *bighas* * of rupit land, and the land occupied by his house and garden, which is now called *basti*, free of revenue. Any land taken up in excess of this amount was assessed at Re. 0-4-0 a *bigha*. In addition to this each house seems to have given about one rupee's worth of silk to the Raja and to have paid a tax of one rupee per plough. Buchanan Hamilton, writing in 1809, states that each parganna was let for a term of years to a Chaudri, who made what profit he could out

* One acre=3·025 bighas.

of land held in excess of the *paiks'* free grants. The Chaudris are said to have retained for their own use three-fifths of the gross collections, and to have treated the raiyats in a very oppressive manner. The nominal rent per plough of land in Kamrup was Rs. 2, but the exactions of the chaudri raised it from Rs. 5 to Rs. 7. The yield of a plough was said to be 79 maunds of "rough rice" and 16 maunds of mustard seed. Estimates of yield prior to the era of crop experiments were generally too high, so that the area of a plough was probably between four and five acres, and the rates exacted by the Chaudri must at that time have seemed oppressive. Permission to export mustard was only given on payment of five baskets of rice. North of the Brahmaputra, the whole of the profits of agriculture were, according to the same authority, absorbed by the Government or the hill tribes, each power sending a force, which took as much as possible from the cultivators.

Early British settlements.

On the occupation of the country by the British the system of compulsory labour was abolished, and the *paik* land was assessed to revenue. A regular land-tax was then introduced in place of the poll-tax, and the country divided into mahals. Annual settlements of these mahals were made with men who were simply collectors of revenue, selected from the more respectable but impoverished Assamese families. In 1834-35, a further change was made, and leases for terms of years began to be introduced. At the same time the collector of revenue was partially transformed into the present mauzadar, by being made a contractor for the amount of the assessment, and paid

by any extension of cultivation which might occur during the continuance of his lease. In 1861, a slight enhancement was imposed, and the revenue rates per *bigha* were raised to 6 annas for *rupit* and 4 annas for other land.

Colonel Hopkinson's settlement.

In 1865, the Commissioner, Lieutenant-Colonel Hopkinson, proposed to discriminate between *basti* or garden and other land, and to raise the *bigha* rates to Re. 1 for *basti*, 10 annas for *rupit*, and 8 annas for other land. No detailed enquiries were made; there was no attempt to estimate the comparative value of the three different classes of land; there was no discrimination between good and bad land in the same class or even between district and district. The revised rates were, however, so moderate that it was never seriously contended that they would have an oppressive incidence even on the worst land on which they were imposed. Colonel Hopkinson was of opinion that the existing assessment was ridiculously low, and, in support of his opinion, pointed out that in 1864-65 the receipts from opium were about four lakhs of rupees more than the total land revenue of his division, an excess which in those days represented a difference of about 40 per cent. The new assessment was successfully introduced in 1868-69, and in spite of the enormous enhancement the revenue was collected without difficulty.

The settlement of 1893.

The next settlement was made in 1893. The three-fold division of land was retained, but instead of imposing the same rate on all land of the same class throughout the district, the villages were divided into four grades and

the rates assessed varied with the grade of the village. * The villages were provisionally graded by the Director of Land Records and Agriculture, the class in which each village was placed being determined by the demand for land, and not by any intrinsic considerations of the value of the produce, the fertility of the soil, or the profits of cultivation. The demand for land was estimated by ascertaining the density of the population, the proportion of settled to unsettled land, and the proportion of fluctuating cultivation. These lists were sent to local officers for examination, and were modified by them in view of the fertility of the soil, the facilities for bringing the produce to market, and the rents paid by sub-tenants where ascertainable. This enquiry was carried out by the ordinary district staff within the space of a single cold weather, and the results obtained made no pretensions to scientific accuracy. Such accuracy was considered to be unnecessary, as it was not intended to impose anything like the maximum assessment on the land. The Government had no desire to assess up to its fair share of the value of the produce of the soil, and under these circumstances it was contended that it would be waste of time and money to have recourse to any minute and

* The following rates per bigha were imposed.

Class.	Basti.		Rupit.		Faringati.	
	Rs.	as.	Rs.	as.	Rs.	as.
1st	1	6	1	0	0	12
2nd	1	4	0	14	0	10
3rd	1	2	0	12	0	9
4th	1	0	0	10	0	8

elaborate classification of the soils, to crop experiments on a large scale, or to a close examination of all the elements that affect the net profits of the cultivator. The theory on which the settlement was based, was that the worst lands were capable of bearing the assessment imposed, and that Government alone was a loser by its inequalities. Subsequently the idea gained ground that the assessment was not as low as had been at first supposed. The earthquake of 1897 seriously injured a considerable tract of land, either by covering it with sand or by rendering it liable to flood. The total land revenue demand of the district was, accordingly, reduced by Rs. 60,000 in 1901-02.

The settlement of 1902. The soil unit.

The resettlement which was begun at the close of 1902 was carried out in a much more elaborate and scientific manner than any of its predecessors. While the maps and records were being brought up to date, the Settlement Officer made detailed enquiries with the object of ascertaining the classes into which the land could be most suitably divided, and the relative value to be allotted to each class. The unit of settlement was what is known as the soil unit. Each soil unit pays a certain quantity of revenue, the actual sum assessed per soil unit varying with the village. To every *bigha* of land is assigned a certain number of soil units, the number varying with the class of land concerned. Thus in every *bigha* of first class homestead land, there were 24 soil units, whereas in every *bigha* of badly flooded land there were only 5, and whatever revenue might be assessed on badly flooded land in the village, first class

homestead land, if there was any, paid nearly five times as much. The data used when determining the number of soil units to be allotted to each class of land were (1) the local enquiries of the Settlement Officer and his Assistants, (2) experiments made with the view of ascertaining the average quality of the crop, (3) the opinions expressed by certain selected persons, and (4) the views of the raiyats, who were consulted as much as possible. Considerable weight was attached to the opinions of the raiyats, as it was thought that they at any rate should know the comparative value of the different kinds of land they held. It will be seen that the process of differentiation was carried much further at the new settlement than at the one which preceded it. In 1893, the maximum rate per *bigha* in a village could never be more than double the minimum. In 1903, the maximum rate might be nearly five times the minimum. In 1893, all land in the village followed the class of the village. In 1903, there was no such restriction, and a small area of poor land in an otherwise rich village could be assessed on its own merits.

Value assigned to each soil unit at the new settlement.

After the maps and records had been brought up to date, a special staff was deputed to determine the class into which each field or homestead fell. The total number of soil units in the block, or group of several mauzas into which for re-assessment purposes the district was divided, was then ascertained,* and the former revenue

* The area falling under each class was known, and all that was required was to multiply the number of bighas in each class by the number of soil units in the class.

of the block divided by this figure. The quotient represented the incidence of revenue per soil unit under the former settlement and was known as the *unit incidence.*

The next stage in the proceedings was the determination of the new *unit rate*, the rate which was to be assessed on each soil unit during the current settlement.

The Settlement Officer first decided whether he would raise or lower the unit rate for the block as a whole, and took as his standard in assessing villages the unit rate he had fixed on for the block. This was the rate imposed on the average village, while villages above or below the average had the rate raised or lowered in proportion to the extent to which they seemed to differ from the mean. The general condition of the inhabitants, the prices they could obtain for their produce, and the facilities for trade which they enjoyed were the principal factors taken into consideration when determining the value to be assigned to the soil unit of the village.

Classes of land.

Land in Kamrup was divided into no less than 48 different classes. Rice land was first divided into two main heads, good and poor. Each of these heads was further sub-divided into four groups, *i. e.*, *bardhantoli* or land ordinarily fit for the cultivation of *bar* dhan, *laghantoli* or land on which *lahi* dhan could be grown. *Kharmatoli* or land on which transplanted *ahu* or the inferior kinds of *lahi* dhan could be grown, and *ahutoli* or land unfit for transplanted rice of any kind, but fit for broadcast *ahu*. Each of these groups was again sub-divided into five minor heads, *sadharan* or average, *dongtoi* or land irrigated by artificial channels, *banotia* or land exposed to

flood, *olpara* or land which receives the drainage of the village site, and *dakshin chechukia* or shaded land. The area included in the last two classes was, however, very small, and after 1903-04 they were abandoned. In addition to these forty classes of rice land there were two more classes for land growing *bao*, one ordinary (*baotoli*), the other flooded (*banotia baotoli*). Deeply flooded land (*jalaton*) from which a crop can only occasionally be expected formed another class, and there were four classes of homestead land (*basti*). All land which was not included in any of the preceding classes was styled *faringati*. The following statement shows the number of soil units usually assigned to a *bigha* of each class of land in Kamrup:

		Sadkaran.	*Dongtoli.*	*Banotia.*	*Olpara.*	*Dakshin chechukia.*		
1		2	3	4	5	6	7	
Athaletiya or Moulalia	*Bardhantoli.*	20	23	12	25	13	*Baotoli*	... 9
	Laghantoli.	16	18	12	20	11	*Banotia Baotoli*	... 5
	Kharmatoli.	13	15	10	16	8	*Jalaton*	... 5
	Akutoli.	9	...	7	11	6	*Faringati*	... 5
Balisiria or Kachua	*Bardhantoli.*	16	18	10	20	11	*Basti*, 1st class	... 24
	Laghantoli.	12	14	9	15	8	,, 2nd ,,	... 20
	Kharmatoli.	8	10	6	10	6	,, 3rd ,,	... 16
	Akutoli.	7	...	5	9	5	,, 4th ,,	... 10

The incidence of revenue on each soil unit differed in the different villages, but was generally about one anna.

At the time of writing (1905) the settlement is still in progress.

Growth of land revenue.

The following statement shows the gradual expansion of the land revenue and the settled area since the district first came under our administration:—

A. D.				Rs.	Acres.
1834-35	...	..	...	2,11,951	324,301
1852-53	..	...	...	3,48,017	475,533
1865-66	...	...	...	4 25,163	472,510
1868-69	..	...	...	*7,97,267*	not available.
1892-93	...	..	...	9,79,347	695,887
1893-94	..	..	...	*13,33,314*	*688,029*
1902-03	...	...	...	12,33,082	647,651

The figures for years in which a new settlement was introduced are printed in italics.

Established and fluctuating cultivation.

The system of cultivation in the district falls into two main heads, established and fluctuating. In the established area the staple crop is *sali* or transplanted paddy land is not readily resigned, and frequently possesses a considerable market value. In the fluctuating tracts the staple crops are mustard, pulse, and summer rice *ahu*, and continual change is one of the essential elements of cultivation, the same field being seldom cropped for more than three years in succession. Most of the fluctuating area lies in a belt on either side of the Brahmaputra. In 1903-04, only 9 per cent of the settled area of the *sadr* subdivision was classed as fluctuating, but in the Barpeta subdivision the proportion was no less than 50 per cent.

Annual and Periodic leases.

The bulk of the land on which the staple crops of the district are grown is held direct from Government by the actual cultivators of the soil on annual or periodic lease.

The periodic lease confers a right of re-settlement and a heritable and transferable title. Annual leases merely authorise the occupation of the land for a single year, though in practice the rights of transfer, inheritance, and re-settlement are recognised. The only drawback of the annual lease lies in the fact that if the land happens to be required by Government, it can be resumed without payment of compensation to the occupant. Land held under either form of lease, or any individual field within the holding, can be resigned, on formal notice of the fact being given to the Deputy Commissioner.

The mandal. The basis of the land revenue system is the mandal, the village accountant and surveyor, who draws a modest stipend ranging from Rs. 8 to Rs. 12 per mensem. In March he proceeds to his circle, inspects the fields which have been formally resigned to see whether they have been actually relinquished, tests the boundaries of fields taken up in recent years to see whether they are in accordance with the map, and surveys land which has been broken up for what is called the regular settlement or for which a formal application has been filed. His two principal registers are the *dagchitha*, in which particulars are entered for each field within the village, and the *jamabandhi* or rent-roll, which classifies the fields by holdings, and shows the area covered by each lease. During the hot weather he is occupied with the revision of his maps and registers, and the preparation of his leases. When the winter comes, he again proceeds to the field, distributes the leases he has prepared, and surveys the land which

has been broken up since his former tour, and which is included in what is known as the *dariabadi* or supplementary settlement. He is also required to prepare statistics of the area under different crops ; he assists in the collection of the revenue and is often ordered to report on local disputes connected with the land. In most provinces in India a settlement is concluded for a term of years. During its currency no land which is held on lease can be resigned, and there is not as a rule any appreciable quantity of waste land to be taken up. The state of affairs in Kamrup is very different. In 1902-03, the total settled area was 648,000 acres, the area excluded was 32,000 acres and the area of land newly taken up 52,000 acres. It must not, however, be supposed that this kaleidoscopic shifting of the fields is taking place in every portion of the district, and that everywhere may be seen the spectacle of cultivated land becoming jungle and jungle land changing into fields of waving rice. In the established portion land is seldom given up, but in the fluctuating area, as has been already explained, it is less trouble to burn the jungle and break up new land every second or third year, than to clean the fields of the weeds which spring up after the land has been two or three times cropped.

Above the mandal comes the supervisor kanungo, a peripatetic officer on pay ranging from Rs. 30 to Rs. 40, who checks his work both in the field and in the office. The superior revenue officers are called sub-deputy collectors and draw salaries ranging from Rs.100 to Rs.200 per

Superior settlement staff.

mensem. The appointments are usually made by selection from candidates who must be of good physique and moral character, of respectable family, under 25 years of age, and must have either taken a university degree or have read up to that standard.

The total sanctioned staff for the Kamrup district is 3 sub-deputy collectors, excluding those employed as tahsildars, 14 supervisor kanungoes, and 296 mandals.*

Land.

The different tenures in the district fall under two main classes—(1) those under which land is held for the cultivation of ordinary crops, and (2) those under which grants have been made for the growth of tea or other crops, which are not included amongst the ordinary staples of the Province, and which require a considerable amount of capital for their production. The bulk of the land included in the first class is settled under the ordinary rules at full rates, but there are also considerable areas of revenue free (*lakhiraj*) land, and land settled at half rates (*nisfi khiraj*). In the time of the Ahom kings the whole of this land is said to have been held rent free, but in 1834 the Government of India ruled that "all rights to hold lands free of assessment founded on grants made by any former Government must be considered to have been cancelled by the British conquest. All claims therefore for restoration to such tenures can rest only on the indulgence of Government

* The sanctioned staff will probably be modified on the re-introduction of the mauzadari system.

without any right".* Mr. David Scott, the first British Commissioner of Assam, found that, even under the Ahom Rajas, these revenue free lands had been assessed at the rate of five annas a *pura*,† and he imposed this cess, which was subsequently raised to eight annas, upon them. The Government of India then directed that an enquiry should be instituted into these claims and that all cases in which land was held on *bonâ fide* grants dating from before the time of the Burmese conquest, or on account of services which were still performed, should be reported to them for orders. These instructions were not fully observed by the Commissioner of that time, Captain (subsequently General) Jenkins. This officer, for reasons which have never been ascertained, drew a broad distinction between *debottar* or temple lands, and *brahmottar* and *dharmottar* lands, *i. e.*, lands which were devoted to some religious purpose but were not actually the property of a temple.‡ The former he released from all claims for revenue; on the latter he imposed the rate assessed by Mr. Scott, which happened to be half the full rates prevailing at

* Letter No. 790, dated 25th August 1834, from the Government of Bengal to the Commissioner of Assam. The history of these estates is discussed at length in the Introduction to the Assam Land Revenue Manual by Sir William Ward, K.C.S.I., page xci.

† A pura = 4 bighas. 3·625 bighas = 1 acre.

‡ *Debottar* estates are again of two kinds, *bhogdoni* and *paikan*. The raiyats on the former are bound to supply one daily ration, *bhog*, to the temple for each unit of land. The raiyats on the latter are required to render certain somewhat vague kinds of service. *Bhogdoni* land was generally confirmed, possibly, as the Settlement Officer observes, because claims to *bhog* were easier to determine than somewhat vague and uncertain claims to service.

the time. No report was submitted to the Government of India and no final orders were ever received from them, but the right of the former class of proprietors to hold free of revenue, and of the latter at half the usual rates, has been definitely recognised. The total area of *lakhiraj* land in the district in 1903 was 33,908 acres and of *nisfi khiraj* land 1,47,769 acres. The area settled year by year at full rates is shown in Table XV.

rant of land r the cultiation of special crops.

Two sets of rules were in force for the grant of land for tea prior to 1861. The underlying principle in each case was that the land should be held on long leases at low but progressive rates of revenue, and that precautions should be taken against land speculation by the imposition of clearance conditions. Between 1861 and 1876 the fee simple tenure of waste land grants was put up to auction at an upset price of Rs. 2-8-0 an acre, which in 1874 was raised to Rs. 8. The holders of grants under the earlier rules of 1838 and 1854 were allowed to purchase a fee simple tenure by payment of twenty times the revenue then due, provided that the clearance conditions had been carried out. Advantage was very generally taken of this concession, and there are now only 31 acres of land in the district held under the rules of 1838, and only 457 acres under the rules of 1854, while there are 4,456 acres held on fee simple tenure. The existing rules came into force in 1876. The land is sold at an upset price of Re. 1 per acre, for, though it is nominally put up to auction, there is no case on record in which more than one applicant appeared to bid. For

two years the grant remains revenue free, and the rates gradually rise to 8 annas an acre in the eleventh, and one rupee in the twenty-first year. The lease runs for 30 years, and when it expires the land is liable to re-assessment The total area settled under these rules will be found in Table XV

Collection of land revenue.

The first settlement was introduced by Captain Bogle in 1833-34.* He divided the district into 76 parganas, each of which was placed under a Chaudri, who was assisted by *patwaris*, *takureahs*, *kakatis* and peons. The cost of collection was heavy, and amounted to 18 per cent of the revenue demand. At the time of Mr. Mills' visit, in 1853, the cost of collection had risen to 20¼ per cent, and the fiscal staff consisted of 151 Chaudris, who had under them 89 *patwaris*, 495 *takureahs*, 497 *kakatis* and 993 peons Settlements were made with the Chaudris either annually or for a term of years. The latter arrangement was not popular, and in 1853, out of 311 mahals, 216 were held on annual lease. As, however, the raiyat was allowed to break up any quantity of land rent free on his agreeing to pay the rent of his entire holding during the whole time of the Chaudri's lease of the parganas, it would appear that the Chaudri had something to lose but very little to gain from a lease for a term of years.†

Larger revenue and tahsils.

The general tendency since that date has been to increase the size of the unit of collection. In 1867, the

* Captain Bogle's report will be found at page 65 of File No. 298, Bengal, of 1835.

† *Vide* Mr. Mills' report on Kamrup

mauzadars, as the collecting officers were called, received 15 per cent of the revenue as commission, and were allowed half the revenue of land reclaimed during the currency of the settlement. Three years later their commission was reduced to 10 per cent, and in 1872 the further restriction was imposed that this 10 per cent could only be drawn on the first Rs. 6,000 of revenue, 5 per cent being allowed on revenue in excess of that sum. In 1883, the idea gained ground that Government would do better by putting the mauzadar aside and employing salaried officials as a collecting agency. Mauzas were accordingly amalgamated, and placed in charge of an official called a tahsildar, who was remunerated by a fixed salary and was exempted from the responsibility imposed upon the mauzadar of paying in the revenue on the due dates, irrespective of the amounts actually collected by him. The first tahsil was opened at Palasbari in April 1883, and two more were established in the same year at Boko and Chaygaon. Then followed Patidarang in 1884, Gauhati and Rangia in 1885, Bajali in the Barpeta subdivision in 1886, Tamulpur and Hajo in 1887, Barama and Nalbari in 1888, and Raha in the Barpeta subdivision in 1891.

Comparative advantages of tahsildars and mauzadars.

The tahsildari system is cheaper than that of collection through mauzadars, the cost in one case being about 5 per cent, in the other about 7 per cent of the gross amount realised. Serious difficulties are, however, experienced in dealing direct with such a large body of raiyats, and there is no doubt that the tahsil system is

not as popular with the people as the one which it replaced. A mauzadar of experience knows whether delay in payment is due to shortness of funds or to recalcitrancy; he knows the time which is most convenient for payment in individual cases; and, as he is not bound by the *kist* dates, his collection admits of an elasticity which no Government rules can establish. It has the further advantage of providing a body of representative men, who, while regarded by the people as their leaders, are bound to the Government by the facts of their position. It has accordingly been decided to try the experiment of gradually breaking up the tahsils and substituting in their place mauzadars who will be entrusted with the duty of collecting from Rs. 20,000 to Rs. 30,000 of revenue. This policy has already been adopted in the case of the Raha and Boko tahsils, which were resolved into their constituent mauzas in 1903, while the Tamulpur tahsil was abolished in 1904. The revenue demand on account of the regular settlement is due in two instalments, three-fifths on January 15th and two-fifths on the 15th February, except in those villages which meet the Government demand from the sale of mustard and pulse, where it is due in one instalment on March 15th. The demand on account of the supplementary settlement is also due in one instalment on that date. If a raiyat defaults a notice of demand is issued calling upon him to pay up the amount due.* This has usually the desired result, but if further steps are called

* Steps have recently been taken to empower Deputy Commissioners to dispense with the notice of demand and proceed at once to attachment if they think it necessary to do so.

for the defaulter's property is attached. It is very seldom necessary to do more than this, but, as a last resort, the goods and even the lands of the defaulter can be sold. In 1903-04, notice of demand was issued on account of 17 per cent of the total land revenue demand, and property was attached on account of 5 per cent. The number of cases in which it was necessary to have recourse to sale was very small, and the revenue on account of which property was sold only represented 0·1 per cent of the total demand.

Revenue realised in 1830 by release of slaves.

At the present day it seems strange to read that in 1830 orders were issued by the Government of India that if a defaulter possessed no other property, his revenue might be realized by releasing a certain proportion of his slaves, each slave being reckoned as equivalent to from Rs. 50 to Rs. 100. It is, however, clear that the slavery must have been of a very mild and patriarchal character, as the local authorities were warned to satisfy themselves that the emancipated slaves would not nullify the beneficent intentions of Government by placing themselves again in the position of bondsmen to their former masters.

Town land.

In 1893, the town of Gauhati was re-settled for a term of fifteen years. The rate of assessment for trade sites varied from Rs. 300 to Rs. 30 an acre, and that for residential land from Rs. 9 to Rs. 6. Under the rules now in force waste land taken up for the first time within town limits is to be settled ordinarily for a term of thirty years, at a fair rent not exceeding the annual

letting value of the site, and the lease of the land applied for may, if the Deputy Commissioner thinks fit, be put up to auction and knocked down to the highest bidder. These rules do not, however, apply to Barpeta, which is treated like any other village. The greater part of the town is, however, included in a *nisfikhiraj* grant held by the Barpeta *sattra*.

Unsettled waste.

In 1903-04, no less than 52 per cent of the total area of the district was classified as unsettled and culturable waste. The expression "culturable" must, however, be received with a certain degree of reserve, and a large proportion of this area is probably unfit for permanent habitation or continuous cultivation. The bulk of this waste land is situated in the Barpeta subdivision, in the Tamulpur tahsil, and in the Boko and Gauhati tahsils, south of the Brahmaputra, which contain large areas of hill and swamp. The total area of each fiscal unit and the area which was waste in 1902-03 will be found in Table XV A.

Excise.

The excise revenue of Kamrup is not very large, and from Table XIII it will be seen that in 1903-04 it only amounted to Rs. 2,33,000. which was less than a third of the revenue realised under this head in Lakhimpur. About three-fourths of the excise revenue is derived from opium. Full details with regard to the number of shops for the sale of liquor and the different kinds of drugs, and the revenue obtained, will be found in Table XVI.

Opium.

Prior to 1860 no restriction was placed upon the cultivation of the poppy. The evil effects of unrestrained

indulgence in opium were undeniable, and in that year poppy cultivation was prohibited, and the drug was issued from the treasury, the price charged being Rs. 14 a seer. This was raised to Rs. 20 in 1862, Rs. 22 in 1868, Rs. 23 in 1873, Rs. 24 in 1875, Rs. 26 in 1879, Rs. 32 in 1883, and Rs. 37 in 1890, the price at which it now stands. While Assam was under the Bengal Government licenses for the retail vend of opium were issued free of charge. In 1874, a fee of Rs. 12 per annum was levied on each shop, and in the following year it was raised to Rs. 18. Between 1877 and 1883 the right to sell opium in a particular mahal was put up to auction, but this system was found to be unsatisfactory, and in the latter year the individual shops were sold, as is done at the present day. The general result of the Government policy has been to enormously reduce the facilities for obtaining the drug. In 1873-74, there were in Kamrup 845 shops for the retail vend of opium; thirty years later there were only 112. The opium habit was never as prevalent in Lower as in Upper Assam, and in Kamrup it appears to be gradually dying out. In 1873-74, 290 maunds of opium were consumed, in 1899-1900 only 121. Ganja and cigarettes are said to be taking its place to some extent, and it is evidently not popular with the rising generation.

The drug is generally swallowed in the form of pills, or mixed with water and drunk. Madak is made by mixing boiled opium with pieces of dried pan leaf and stirring it over the fire. The compound is then rolled up

into pills and smoked. Chandu is made out of opium boiled with water till the water has all evaporated, and is smoked like madak in the form of pills. Opium is not generally smoked in Assam, and this form of taking the drug is usually supposed to be more injurious than when it is simply swallowed.

The outstill system of excise is in force in Kamrup, that is to say, the right to manufacture and sell liquor at a given spot is every year put up to auction.

Country spirits.

From the statement in the margin it will be seen that though there has been a large decrease in the number of shops since 1880 there has been a considerable expansion of the revenue.

Year.	No. of shops.	Revenue.
		Rs.
1873 74 ...	10	3,473
1879-80 ...	27	5,870
1889-90 ...	11	6,364
1899-1900 ...	12	14,320

This is due to the increase in the number of foreigners and to greater competition at the auction sales. The natives of Assam, who form the bulk of the population of Kamrup, drink, when they drink at all, home made beer or spirit, for though the unlicensed distillation of spirit is illegal, the process in so simple that it is not easy to detect and punish the evasion of the law. The result is that the revenue from country spirit in Kamrup is very low, and in 1899-1900 was only a tenth of that obtained in Sibsagar, though the total population of the two districts was about the same. The explanation is to be found in the fact that in Sibsagar the number of foreigners is ten times as numerous as in Kamrup.

The still.

Country spirit is manufactured by native methods, and generally in what is known as the open still. The apparatus employed consists of a large brass or copper retort which is placed over the fire, to the top of which is fitted the still head, a compound vessel, part of which is made of earthenware and part of brass. The wash is placed in the retort, and, as it boils, rises in the form of vapour into the still head, over the outer surface of which a stream of cold water is continually kept flowing. As the vapour cools, it is precipitated in the form of liquid, and is carried off by a bamboo tube into a vessel placed at the side. The mouth of this tube is open, and the spirit trickles from it into the vessel beneath, so that the outer air has access by this channel into the still head and retort in which the process of distillation is going on. In the closed still, the vapour passes down two tubes into two receivers, where it is cooled and condenses into liquid. These tubes are so fixed to the receivers that the air cannot have access to the spirit, and, though distillation does not proceed so rapidly, the liquor produced is stronger than that obtained from the open still.

Material employed.

The material employed is generally the flower of the mohwa tree (*bassia latifolia*), which contains a very large proportion of sugar, but its place is sometimes taken by molasses and rice. The following are the proportions in which these ingredients are generally mixed—mohwa 30 seers and water 60 seers, or mohwa 25 seers, molasses 5 seers, and water 60 seers, or boiled rice 20 seers, molasses 10 seers, and water 80 seers. *Bakhar*, a substance composed of leaves, roots and spices, whose actual

ingredients are not divulged by the villagers who manufacture it, is occasionally added to the wash, which is put to ferment in barrels. Fermentation takes three or four days in summer and a week in the cold weather, and the wash is then considered to be ready for the still.

The process of distillation takes about three hours. A retort of 40 gallons yields two gallons of spirit in an hour and three quarters, three gallons in two hours and a quarter, and four gallons in three hours. The best and strongest spirit comes off first, and in the case of a brew of 30 seers of mohwa the first 3½ gallons will be classed as *phul*, if they are at once drawn off from the receiver. If they are allowed to remain while two more gallons are distilled, the whole 5½ gallons will be classed as *bangla*. The exact proportions vary, however, at the different shops, some distillers taking 4¼ gallons of *phul* or 5¼ gallons of *bangla* from 30 seers of mohwa. Occasionally only two gallons of spirit are distilled from 30 seers of mohwa, and the liquor is then called *thul*, is very strong, and is sold for one or two rupees a quart. *Thul* is also sometimes made by re-distilling *bangla*. Only one kind of liquor is generally taken from each distillation, as, if the *thul* or *phul* were removed, the spirit subsequently distilled would be not only weak but impure. Strong liquor watered to reduce it to a lower strength is not considered palatable, and it seems to be the usual practice to distil the liquor at the actual strength at which it will be sold. One disadvantage of the cheaper kind of liquor is that it will not keep, and in four or five weeks it is said to lose all its spirituous qualities.

Laopani.

Laopani, or rice beer, is the national drink of the unconverted tribes, and a special name, *modahi*, is applied to those who have to some extent attorned to Hinduism but have not yet abandoned their ancestral liquor. It is also taken by some of the humble Hindu castes, and is largely used by garden coolies if facilities are not afforded to them for obtaining country spirit. The following is the usual system of manufacture followed. The rice is boiled and spread on a mat, and *bakhar* is powdered and sprinkled over it. After about twelve hours it is transferred to an earthen jar, the mouth of which is closed, and left to ferment for three or four days. Water is then added and allowed to stand for a few hours, and the beer is at last considered to be ready. The usual proportions are 5 seers of rice and 3 chattaks of *bakhar* to half a *kulsi* of water, and the liquor produced is said to be much stronger than most European beers. Liquor is often illicitly distilled from *laopani* or boiled rice, by the following simple method. An earthen pot with a hole in the bottom is placed on the top of the vessel containing the *laopani* or rice and the whole is set on the fire. The mouth of the upper pot is closed by a cone-shaped vessel filled with cold water, and a saucer is placed at the bottom of the pot over the hole. The vapour rises into the upper of the two jars, condenses against the cold cone, with which the mouth is closed, and falls in the form of spirit on to the saucer beneath. Care must of course be taken to see that the various cracks are closed against the passage of the spirituous vapour, but this can easily be done with strips of cloth. No attempt is made to restrict the manufacture

of rice beer in moderate quantities for home use, as any attempt to do so would certainly lead to corruption and oppression. In a matter of this kind the influence of the Hindu gosains, and the pressure of local village opinion, has more effect than any direct action of the Government.

Ganja is usually mixed with water, kneaded till it becomes soft, cut into small strips and smoked. Wild ganja grows very freely in Kamrup, but it is doubtful whether it is much used except as a medicine for cattle. It does not produce such strong effects as the ganja of Rajshahi, but the leaves are sometimes dried and mixed with milk, water, and sugar to form a beverage. Ganja.

The revenue raised from income tax in Kamrup is lower than that obtained from any other district in the Province except Nowgong, and in 1903-04 only amounted to Rs. 11,600. The receipts, moreover, show no tendency to increase. As far back as 1888 they amounted to Rs. 15,500, and the maximum was reached in 1893-94 with Rs. 17,200. The marked decrease that occurred in 1904 was due to the exemption of incomes between Rs. 500 and Rs. 1,000 from taxation. The condition of the people has, however, been far from satisfactory. Public health was for a time extraordinarily bad; agriculture was seriously affected by the earthquake of 1897 and the subsequent floods, and during the last years of the century the taxable income must have been appreciably diminished. The great majority of the assessees under Part IV (Other sources of income) were shopkeepers, persons engaged in the mustard trade, boat- Income Tax.

builders, and professional graziers. Several of the most prosperous Marwari merchants are assessed in Calcutta on the profits made by them in Assam.

Stamps.

The receipts under the head of judicial stamps in 1903-04 amounted to Rs. 51,078. Kamrup stood second in the list of districts in the Assam Valley, but the revenue obtained was barely one-eighth of that realised in Sylhet. Non-judicial stamps brought in Rs. 16,369, a sum which was exceeded by Sibsagar and largely exceeded by Lakhimpur.

Public works.

Public works are in charge of the Executive Engineer who is stationed at Shillong and is entrusted with the construction and maintenance of all the larger public buildings. The most important are the jail, the public offices, schools and telegraph offices at district headquarters, circuit houses, dâk bungalows, and inspection bungalows on provincial roads. Inspection bungalows on other roads are maintained by the Local Boards. The roads which are directly under the Department are the south trunk road (80 miles), the north trunk road from Raha to Dumunichauki (72 miles), and the road from Barpeta to Kholabanda (18 miles).

It has already been explained that Local Board works that require professional skill or engineering knowledge are usually made over to the Executive Engineer for execution.

Government.

For general administrative purposes the district is divided into two subdivisions. Gauhati is under the immediate charge of the Deputy Commissioner; Bar-

peta is entrusted to an assistant magistrate, who is usually a native of the country. The Deputy Commissioner is allowed three subordinate magistrates and two sub-deputy-collectors as his immediate assistants and a second magistrate and a sub-deputy-collector are usually posted at Barpeta. The unit of police administration is the thana, of which there are 16 in the district, and of revenue administration the mauza or the tahsil.

Criminal and Civil Justice.

Appeals lie to the Deputy Commissioner from orders passed by magistrates of the second or third class, and from the orders of first class magistrates to the Judge of the Assam Valley. Appeals from the Judge lie to the High Court of Fort William in Calcutta. In 1902, there were seven stipendiary and two honorary magistrates in the district, and the former decided 1,520 and the later 17 original criminal cases. In the course of these proceedings 3,884 witnesses were examined. Altogether there were 1,334 cases under the Indian Penal Code returned as true, the immense majority of which were either offences against property or against the human body There is little serious crime in Kamrup, and most of these offences were either petty assaults or thefts of small sums of money. Civil work is not heavy, and the Deputy Commissioner acts as sub-judge, while one of the assistant magistrates in each subdivision discharges the functions of a munsif. In 1902, the sub-judge heard 12 original cases and 25 appeals, while 1,630 original suits were disposed of by the munsifs A large proportion of the cases were simple money suits, nearly four-fifths of which were disposed of without contest.

Registration. The Deputy Commissioner is also the registrar of the district, and one of the assistant magistrates in each division acts as sub-registrar. Only 817 documents were registered in 1903.

Volunteering. A Volunteer Corps was formed at Gauhati in 1885, with 39 members on the rolls, but was disbanded in 1891 as it was found impossible to keep it up to strength. A new company was formed in 1894, and was, at first, amalgamated with the Shillong Volunteer Rifles, but, in 1901, it was united with the Assam-Bengal Railway Volunteer Corps.

Police. The civil police are in charge of a District or Assistant Superintendent of Police The sanctioned strength consisted in 1904 of two inspectors, 24 sub-inspectors, and 310 constables One hundred and forty-four smooth-bore martinis are allotted to Kamrup, and a reserve of men is kept up at the district and subdivisional headquarters who are armed with these weapons and are employed on guard and escort duty. Up-country men, Nepalese, and members of the aboriginal tribes are usually deputed to this work, though attempts are made to put all the constables through an annual course of musketry.

The district is fairly free from serious crime and rural police are not employed; such assistance as is necessary being given by the village elders or *gaoburas*. In addition to their regular duties in connection with the prevention and detection of crime, the police are required to check the returns of vital statistics, manage pounds, enquire into cases in which death has not been due to natural causes, to furnish guards and escorts, and to serve

all processes in warrant cases. There is very little organised crime, and the actual police duties are comparatively light. Table XIX shows the strength and cost of the police in 1881, 1891, and 1901; Table XX the names of the different police stations and out posts, and the force quartered at each.

Military Police.

During the cold weather, the frontier is protected by detachments from the Garo Hills military police battalion. Thirty men, under a native officer, are stationed at Subankhata, and ten men under a non-commissioned officer at Darranga, a little to the east. At the end of March these outposts are withdrawn as the Bhutias then begin to retire to the hills.

Jail.

There is a large jail at Gauhati, which has accommodation for 297 prisoners. The sleeping wards are raised some distance from the ground on masonry pillars, and are thus well ventilated and dry, and every care is taken of the prisoner's health. In spite of this the mortality is generally high. From the statement in the margin it appears that in the twenty years ending with 1900 the annual death-rate on no less than eight occasions exceeded 70 per mille.

Year.	No. of deaths	Death-rate per mille.
1881	... 33	111
1884	... 14	94
1885	... 12	78
1886	... 12	81
1891	... 11	74
1892	... 25	130
1896	... 15	78
1899	... 28	123

Years in which the number of deaths was less than ten are excluded from the statement. In the three years in which the mortality was highest the prisoners were attacked by cholera, and bowel complaints are at all times troublesome. Very few prisoners are now employed on

extra-mural labour as this form of work was found to be incompatible with a satisfactory standard of discipline. The prison manufactures include oil pressing, cane and bamboo work, weaving of durries, cloth and net bags, dhan husking, and brick making. At Barpeta there is a Magistrate's lock-up. Prisoners on conviction are transferred to Gauhati.

Education. In 1841, Mr. Robinson of the Gauhati College described the state of education in the Assam Valley as being "deplorable in the extreme."* He pointed out that, unlike the Province of Bengal, where every village had its teacher supported by general contribution, provincial schools had only recently been introduced in Assam. In 1847-48 there were 24 primary schools in the district. The next few years witnessed very little progress, as on the occasion of Mr. Mills' visit in 1853 there were only 26 schools of all grades. 1874-75 is the first year for which complete statistics are available, and the following abstract shows the progress of education since that year. Figures for years subsequent to 1900-01 will be found in Table XXII.

Year.	No. of secondary schools.	Pupils.	No. of primary schools.	Pupils.	Total No. of pupils.	No of persons in district to each pupil.	Percentage under instruction to those of school-going age.	
							Males.	Females
1874-75 ...	18	1,118	175	3,684	4,802	117	...	...
1880-81 ...	14	1,101	203	5,106	6,207	104	12·43	0·27
1890-91 ...	14	1,111	319	9,236	10·347	61	20·69	1·02
1900-01 ...	15	1,376	281	10,881	12,257	48	27·05	1·02

* A descriptive account of Assam, page 277.

Kamrup is the only district in the Assam Valley in which there is a college. In 1901, a Government second grade college was opened at Gauhati. The buildings have been designed on liberal lines, and it is equipped with an excellent library and laboratory, and with separate hostels for Hindus and Muhammadans. College.

High schools are those institutions which are recognised by the Calcutta University as capable of affording suitable preparation for the Entrance Examination. The boys are taught from the earliest stage of their education up to the Entrance course as prescribed by the University of Calcutta, but many leave school without completing the course. Till recently English was taught in all the classes. The boys in the lowest class no longer learn that language, but the standard of instruction is higher than that prevailing in lower secondary (middle) schools. English is the medium of instruction in the first four classes of high schools ; in the lower classes and in other schools the vernacular is employed. There are three high schools in the district, two at Gauhati, one maintained by Government and one a private institution, and one at Barpeta. Secondary Education.

The course of instruction at middle English and middle vernacular schools is the same, with the exception that English is taught in the former and not in the latter. The following are the subjects taught in the middle vernacular course :—(1) Bengali or Assamese, comprising Literature, Grammar, and Composition, (2) History of India, (3) Geography, (4) Arithmetic, (5) Elements of

Euclid (Book 1), Mensuration of plane surfaces and surveying, (6) Botany and Agriculture.

The middle schools are situated at Kahara, North Gauhati, Gauhati, Palasbari, Chaygaon, Nalbari, Kamalpur, Tamulpur, Chakchaka, Bajali, and Chenga. There is a survey school at Gauhati, and law classes are regularly held.

Primary education.

Primary education is again divided into upper and lower, but the proportion of boys in upper primary schools is less than 4 per cent of the total, and this class of school, like the middle vernacular, is slowly dying out. The course of study in lower primary schools includes Reading, Writing, Dictation, Simple Arithmetic, and the Geography of Assam. In upper primary schools the course is somewhat more advanced and includes part of the first book of Euclid, Mensuration, and a little History. The standard of instruction given still leaves much to be desired, but efforts have been recently made to improve it, by raising the rates of pay given to the masters. Fixed pay is now awarded at average rates of Rs. 8 per mensem for certificated and Rs. 5 per mensem for uncertificated teachers, supplemented by capitation grants at rates ranging from 3 annas to 6 annas for pupils in the three highest classes. The number of schools of each grade, and the number of pupils reading in them, will be found in Table XXII. Sixty-eight per mille of the male population of Kamrup were returned as literate in 1901, a proportion which was higher than that recorded in

any other district in the Assam Valley. The proportion of literate females was only two per mile.

Printing Presses.

In 1903-04, there were three presses, in Gauhati. A weekly paper and monthly magazine are occasionally published.

Medical Staff.

The district is in the medical charge of the Civil Surgeon who is stationed at Gauhati. It contains seven dispensaries, and the supervision of the work done at these institutions is one of the most important of his duties. He also acts as Superintendent of the jail, controls and inspects the vaccination department, and is required to visit and report on all tea gardens on which the death-rate for the previous year has exceeded 7 per cent.

Complete absence of rural sanitation.

It has already been suggested in the chapter on population that there may be something in the climate, the sub-soil level of the water, or some other factor which for the present remains obscure, which is prejudicial to life and health, but there can be no doubt that the conditions under which the people pass their days are not conducive to a long mean duration of life. Their houses are small, dark, and ill ventilated, and the rooms in summer must be exceedingly close and oppressive. They are built upon low mud plinths, and are in consequence extremely damp, and the inmates, instead of sleeping on beds or bamboo platforms, which would cost them nothing to provide, often pass the night on a mat on the cold floor. Their attire, which is suitable enough for the warm weather, offers but a poor resistance to the cold and fogs of winter, and many lives are annually lost from chills, which might have been prevented by the

purchase of a cheap woollen jersey. The houses are buried in groves of fruit trees and bamboos, which afford indeed a pleasant shade, but act as an effective barrier to the circulation of the air, and increase the humidity of the already over-humid atmosphere. Sanitary arrangements there are none, the rubbish is swept up into a corner and allowed to rot with masses of decaying vegetation, and the complete absence of latrines renders the neighbourhood of the village a most unsavoury place. The water supply is generally bad, and is drawn either from shallow holes, from rivers, or from tanks in which the villagers wash their clothes and persons. All of these are undoubtedly factors which contribute to produce a high mortality, and nearly every one of them could be eliminated.

tal Statis-
ns.

Vital statistics are reported by the *gaobura* or village headman to the mandal of the circle, this report being in theory submitted every second week. In practice they were received at much longer intervals, as the *gaobura* was an unpaid servant of Government and not very amenable to discipline. It has recently been decided to allot to each headman 2⅔ acres of land revenue free, and it will now be possible to enforce a stricter adherence to the rules. Between 1891 and 1901, the mean recorded birth-rate was 27 per mille, the death-rate was 32 per mille, and it is certain that both of these figures were much below the truth. The statistics of age recorded at the census are, however, so unreliable that it is not possible to fix a normal birth and death-rate for the district.

Causes of mortality. Cholera.

Fever and bowel complaints are the forms which death most often takes in Kamrup, at any rate according to the official returns. These returns are, however, so inaccurate, and so little reliance can be placed on the diagnosis of the reporting agency, that the figures hardly repay examination. Most fatal illnesses are accompanied by a rise in temperature, and the villagers are in consequence very prone to ascribe every death to fever. Epidemics of cholera from time to time produce a high mortality, for though it is apparently endemic in the district, it occasionally breaks out with quite exceptional violence. The abstract in the margin shows the recorded death-rate from this cause in the years when cholera was most prevalent, and for the purposes of comparison the death-rate in England from all causes in 1901 is added. In 1897, the recorded death-rate from this disease alone exceeded the death-rate from all causes in England in 1901.

Cholera death-rate per mille.	
1882 ...	12·2
1884 ...	5·6
1886 ...	8·8
1890 ...	4·9
1892 ...	7·4
1895 ...	8·1
1897 ...	17·5
1900 ...	7·4
Death-rate all causes England.	
1901 ...	16·9

The disease appears in every part of the district, but is especially common near Palasbari and Rani. The bacillus thrives in the muddy banks of tanks and rivers when they are warmed by the sun and moistened by the rains of April and May, and cholera is thus most prevalent in the spring before the floods rise, and in the autumn when the water level is falling. When the disease appears in an aggravated form hospital assistants are sent with medicine amongst the people, but it is difficult to do much for their relief.

Small-pox and fevers.

Small-pox is especially common amongst the Mahapurushias, who are opposed to vaccination on religious grounds. Barpeta town is the great stronghold of these people, and in 1895 the mortality in that place from small-pox alone was no less than 36 per mille. Soalkuchi and Barduar are also often visited by this disease. The highest death-rates per mille recorded from this cause during recent years were 1·1 in 1895, 2·9 in 1896 and 2·1 in 1897. Fevers are generally of a mixed type and do not differ materially from the malarial fevers of other parts of India. They are most prevalent in May and June and again in October and November, when they are particularly severe, and sink to a minimum in February. The Civil Surgeon has never seen any cases of fever associated with hæmoglobinuria, which is generally known as black water fever, though according to Manson it is found in Assam. Cases of enteric fever have occurred in Gauhati.

Other diseases.

Diphtheria does not usually occur in a virulent form, and neither dysentery nor tuberculosis are common amongst the Assamese. Cases of goitre are frequently found in the neighbourhood of Gauhati, and tetanus and anthrax are met with in every part of the district. Human beings suffer from the latter disease, but it does not as a rule have a fatal termination. The villagers as a whole are fairly free from venereal disease in all its forms. Skin diseases and worms are ailments which are constantly brought for treatment to the dispensaries. The commonest form of worm is the round worm (*ascaris*), and after

that the thread worm (*oxyaris*). Tape worm is not common, and the guinea worm is practically unknown.

The native methods of midwifery leave much to be desired, and it is feared that the mortality in childbirth from puerperal fever and other causes is considerable.

Kala-azar.

The most deadly lethal agent in the district has, however, been the mysterious form of fever known as *kala-azar*. The following account of this disease is extracted from the Report on the Census of Assam in 1901 :—

"When first referred to in the Sanitary Reports of the Province it is described as an intense form of malarial poisoning, which was popularly supposed to be contagious. The Civil Surgeon of Goalpara rejected the theory of contagion, and in 1884 expressed the opinion that *kala-azar* was simply a local name for malarial fever and its consequences. In 1889-90 a specialist (Surgeon-Captain Giles) was appointed to investigate both *kala-azar* and the so-called beri-beri of coolies, and he rapidly came to the conclusion that *kala-azar* and beri-beri were merely different names for anchylostomiasis, and that the mortality was due to the ravages of the dochmius duodenalis, a worm which lives in the small intestine. This theory corresponded with the observed facts to the extent that it admitted, what at that stage of the enquiry could hardly be denied, that *kala-azar* was communicable, the uncleanly habits of the natives of the Province affording every facility for the transfer of the ova of the parasite from the sick to the healthy. But the support which was given to Dr. Giles' views by local medical opinion was withdrawn, when Major Dobson proved by a series of experiments that anchylostoma were present, in varying numbers, in no less than 620 out of 797 healthy persons examined by him. In 1896, Captain Rogers was placed on special duty to make further investigations, and, in addition to demonstrating various differences of a more or less technical character in the symptomatology of the two diseases, he pointed out that whereas *kala-azar* was extremely inimical to life, the number of cases of anchylostomiasis that terminated fatally was by no means large. The conclusion to which this specialist came, after a very careful enquiry, was that the original view was correct, and that *kala-azar* was nothing but a very intense form of malarial fever, which

could be communicated from the sick to the healthy. This opinion was to a great extent endorsed by the profession in Assam, successive Principal Medical Officers declaring that, whatever *kala-azar* was, it had been abundantly proved that it was not anchylostomiasis. The suggestion that malaria could be communicated did not, however, commend itself to the entire medical world, and was criticised with some severity, Dr. Giles writing as recently as 1898 'Dr. Rogers, like a medical Alexander, cuts his Gordian knot by announcing that Assamese malaria is infectious. In this he places himself at variance with not only the scientific but the popular opinion of the entire world.'"

A complete change in popular and scientific opinion was, however, brought about by the development of Manson's mosquito theory, and Major Ross, who visited Assam, in the course of his enquiry into the manner in which infection by malaria takes place, confirmed Rogers' conclusions, and in 1899 placed on record his opinion that, as stated by Rogers, *kala-azar* was malarial fever. Externally the chief point of difference between *kala-azar* and ordinary malarial fever lies in the rapidity with which the former produces a condition of severe cachexia, and the ease with which it can be communicated from the sick to the healthy. Recent investigations have, however, thrown some doubt on the malarial theory. Certain parasites called Leishman-Donovan bodies have been discovered in the spleens of fever patients, and it is thought possible that they may be the cause of the complaint. The origin of the disease is obviously a matter which must always be open to doubt. Captain Rogers is of opinion that *kala-azar* was imported from Rangpur, where malarial fever was extraordinarily virulent in the early seventies, but this is still a matter of conjecture. As to its effects there can unhappily be no question. The

disease appears to have entered Kamrup in 1888 and very soon produced a marked increase in the total number of deaths attributed to fever. It was especially virulent in the Boko and Chaygaon tahsils, in the Rani and Dakhin Sarubangshar mauzas in the Palasbari tahsil, and in the Ramdia, Beltala and Dimaria mauzas in the Gauhati tahsil. These places all lie south of the Brahmaputra, and the effects of the epidemic can be judged from the fact that the population of that part of Kamrup which lies south of the river decreased by nearly 12 per cent between 1881 and 1891. Serious mortality was also caused in the southern mauzas of the Barpeta subdivision, *i. e.*, Barpeta, Chenga, Bagribari, and Bhawanipur. It is a characteristic of the disease that it gradually burns itself out in the localities which it attacks, and in 1892 it began to die down in Kamrup, though the district is not yet entirely free from this appalling scourge.

Increase in facilities for obtaining medical aid.

Though there can be little doubt that many lives are annually sacrificed which could be saved by proper treatment, it is satisfactory to know that of recent years there has been some increase in the facilities for obtaining medical aid, and in the extent to which the people avail themselves of the advantages now offered to them. The first dispensary was opened at Gauhati over thirty years ago. From the statement in the margin it appears that for every patient treated in 1881 there were 13 in 1901, while the number of operations performed rose from 161 to 982.

Year.	Dispensaries. No.	Patients treated. No.
1881 ...	2	3,887
1891 ...	7	18,981
1901 ...	10	51,754

The principal dispensaries are those situated at Gauhati and Barpeta, which had a daily average attendance in 1903 of 102 and 72 patients respectively. The diseases for which treatment is most commonly applied are malarial fevers, worms, cutaneous disorders, dysentery and diarrhœa, dyspepsia and rheumatic affections. The number of patients treated at each dispensary in 1900 and the succeeding years will be found in Table XXV.

Survey.

A professional revenue survey of the district was made at the time when Assam was still a division of Bengal and the maps were published in 1872 and 1874. They are on the scale of one inch to the mile, and, in addition to topographical features, show sites of villages and the physical features of the country. A smaller map on the scale of four miles to the inch was published in 1888 and brought up to date in 1893. An area of 1.570 square miles which included the more densely populated portions of the district was cadastrally surveyed in the seasons of 1883—86, and 1890—93. The maps are on the scale of 16 inches to the mile, and, in addition to topographical features, show the boundaries of each field. Certain areas* which were excluded from the operations of the professional party were subsequently surveyed by local agency on the basis of a theodolite traverse, and the results obtained from the professional and the local agency have been utilised in the revision of the one-inch map.

* The area so surveyed in Kamrup up to 30th September 1900 was 432 square miles.

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STATEMENT A.

List of Tea Gardens.

Name of garden.	Name of owners or company to which it belongs.	Manza in which situated.	Approximate distance by road from Gauhati.	Total area on December 31st 1903.	Area under tea (both mature and immature) on December 31st 1903.	Labour force on December 31st 1903.
			Miles.	Acres.	Acres.	
1. Amchang ...	Kamrup Tea Association & Co	Panbari ...	14	928	342	253
2. Barbari ...	Chunsali Tea Co.	Kharija Dimuria ...	25	887	138	348
3. Barduar ...	Mr. E. P. R. Gilman... ...	Barduar ...	28½	4,392	298	296
4. Barkomar ...	Chunsali Tea Co.	Beltala ...	5	237	592	461
5. Belguri ...	Kamrup Tea Association & Co.	Panbari ...	17½	683	196	147
6 Chunsali ...	Chunsali Tea Co. ...	Ramsa ...	3	954	(a)	(a)
7. Fatasil ...	Srijut Bati Ram Das ...	Beltala ...	1	35	3	4
8. Hengrabari ...	Srijut Chandra Narayan Kuar ...	Do.	6	25	6	8
9. Kamarkuchi .	Mr. H. H. Dombrain ...	Panbari ..	12	381	115	137
10. Kendubam ...	Chunsali Tea Co.	Dimuria ...	27	691	151	(b)
11. Lowmati ...	Do.	Panbari ...	15½	675	70	(b)
12. Luri ...	Do.	Kharija Dimuria	21½	404	250	(b)
13. Mardakata ...	Mr. E. P. R. Gilman ...	Barbangsar ...	9	1,727	231	95
14. Nagrijuli ..	Nagrijuli Tea Co.	Ghargaon ...	49	1,825	450	242
15. Nunmati ...	Chunsali Tea Co.	Ramsa ...	4	596	(a)	(a)
16. Ramgaon ...	Munshi Danis Muhammad ...	Betna... ...	32	552	18	12
17. Rani	Babu Bipra Das Pal Chaudhuri...	Rani... ...	15	804	210	150
18. Sonapur ...	Chunsali Tea Co.	Panbari ...	19	1,074	394	(b)
19. Woodland ...	Babu Mahendra Nath Sarkar ...	Ramsa ...	2	28	13	4

(a) Included in Barkomar.
(b) Included in Barbari.

STATEMENT B.

List of Post Offices.

Post Office.	Mauza or tahsil in which situated.	Post Office.	Mauza or tahsil in which situated.
Barama ...	Barama tahsil ...	Kholabanda ...	Chenga mauza.
Barpeta ...	Barpeta mauza ...	Loharghat ...	Chaygaon tahsil.
Belsor ...	Nalbari tahsil ...	Mandakata ...	Patidarang tahsil.
Bhawanipur ...	Bhawanipur mauza.	Nalbari ...	Nalbari tahsil.
Boko ...	Bangaon mauza...	North Gauhati ...	Gauhati tahsil
Chakchaka ...	Dumkachakabausi	Palasbari * ...	Palasbari tahsil.
Chenga ...	Chenga mauza ..	Patacharkuchi ...	Pub Bajali mauza.
Chaygaon ...	Chaygaon tahsil...	Ranakuchi ...	Hajo tahsil.
Gauhati ...	Gauhati town ...	Rangia ...	Rangia tahsil.
Hajo ...	Hajo tahsil ...	Sonapur* ...	Gauhati tahsil.
Jagdala ...	Chapaguri mauza	Soalkuchi ...	Hajo tahsil.
Kamalpur ...	Patidarang tahsil...	Tamulpur ...	Pub Baska mauza.

The names marked with asterisks are combined post and telegraph offices.
There is also a departmental telegraph office at Gauhati.

STATEMENT C.

List of villages in which there are three or more permanent shops

Tahsil or mauza.	Village	No. of permanent shops.	Tahsil or mauza.	Village.	No. of permanent shops.
Gauhati Subdivision.			*Barpeta Subdivision.*		
	NorthGauhati ...	14			
	Kamakhya ...	7	Bajali ...	Bhebla (Nowsalihat)	
Palasbari ...	...	...		Jolah ...	
	Khanamukh ...	3		Patacharkuchi ...	
	Palasbari ...	37			
Chaygaon ...	Balasidhi ...	9		Ratanpur (Kaljirapara).	
Bagai and Bangaon.	Barpara ...	3	Hastinapur and Bhawanipur.	Bhalaguri ...	4
Luki Bekeli	Bargaon ...	4		Nij Bhawanipur ...	4
Patidarang..	Malara ...	5	Dumkachakabansi.	North Ganakgari, Chakabansi and Chakchaka.	10
	Rangmahal ...	3			
	Sindurighopa ...	4			
	Sundari Sal ...	3	Rupsi ..	Madulipar ...	6
Hajo .	Amingon ...	10			
	Chesamukh ...	4		Raha ...	4
	Khetalkuchi ...	3			
	Kulkati ...	5			
	Maroa ...	5	Sarukhetri	Sarthalbari ...	5
	Nij Hajo ...	17			
Nalbari ..	Nalbari ...	30			
hangia ...	Barijora ..	8			
	Narikuchi ...	3			
	Nij Kowrbaha ...	3			
	Rangia ...	16			
Barama .	Nij Julki ...	3			
	Nij Khona ...	5			
Tamulpur ...	Baregaon ...	4			
	Dhamdhama ...	5			
	Kachukata ...	3			
	Tamulpur ...	5			

STATEMENT D.

List of markets.

Tahsil or mauza.	Name of place at which market held.	Days of week when held.
Gauhati Subdivision.		
	Gauhati town ...	Every day.
Gauhati ...	Moidam hat (Beltola) * ...	Wednesday and Sunday.
	Senabar ...	Friday.
	Sonapur * ...	Every eighth day.
Palasbari ...	Ajara Gadhuli hat	Every evening.
	Amranga bari hat* ...	Wednesday.
	Bahupara Raja hat* ...	Sunday.
	Batar hat* ...	Tuesday and Saturday.
	Dakhola hat ...	Monday and Friday.
	Dhuptala hat* ...	Wednesday and Sunday.
	Gosain hat ...	Thursday.
	Nahira Noa hat	Wednesday.
	Palasbari hat* ...	Tuesday and Saturday.
	Sarjanpara	Tuesday and Friday.
	Kamarkuchi ...	Every eighth day.
Chaygaon	Chaygaon* ...	Thursday and Sunday.
	Nakeri ...	Wednesday.
	Barduar	Do.
Bagai and Bangaon ...	Barparagaon ...	Saturday.
Nij Boko and Kharija Boko.	Jangakhuli ..	Thursday.
	Pukharipara ...	Saturday.
Luki and Bekeli ...	Gangrapara ...	Thursday.
	Habim ...	Tuesday.
	Singira*	Wednesday.
Patidarang ...	Mandakata ...	Sunday.
	Chaukirhat ...	Tuesday and Saturday.
Hajo ...	Barni bari ...	Thursday and Sunday.
	Kalag* ...	Wednesday and Sunday.
	Maroa* ...	Tuesday and Saturday.
	Nij Hajo ...	Ditto.
Nalbari ...	Baranardi ...	Thursday and Sunday.
	Nadala ...	Wednesday and Saturday.
	Nalbari* ...	Monday and Friday.
Rangia ...	Rangia* ...	Thursday and Sunday.
	Sagarkuchi*	Tuesday and Saturday.
Barama ...	Barama* ...	Thursday and Sunday.
	Mathurapur* .	Monday and Friday.
Tamulpur ...	Baregaon* ...	Ditto.
	Dhamdhama* ...	Saturday and Tuesday.
	Nagri Juli ..	Friday.
	Ramgaon ...	Do.
Barpeta Subdivision.		
Bajali ...	Bhebla (Nowaali hat)* ...	Tuesday and Saturday.
Dumkachakabausi ..	Chakchaka* ..	Tuesday and Friday.
Barpeta ..	Barpeta bazar ...	Every day.

* Indicates that the market is leased and the proceeds credited to the Local Board.

STATEMENT E.

List of fairs.

Name of place at which fair is held.	Mauza or tahsil in which situated.	Date at which held.	Estimated number of people attending.
Gauhati Sub-division.			
Kamakhya ...	Gauhati tahsil ...	January ...	300
		August ...	500
		September ..	500
Umananda ...		Falgun ...	500
Aswakranta ...		Chaitra ...	200
Hajo ...	Hajo tahsil ...	At Magh Domahi ...	4,000 to 4,500
Sonlkuchi ...	Do. ...	Asokastomi day ...	Do.
Balisastra ...	Mauza Barigog ...	Ekadashi day of Magh,	5,000
Naogaon ...	Patidarang mauza ...	8th Baisakh ...	500
Khehenipara ...	Barbangsar mauza, Patidarang tahsil.	7th Baisakh ...	500
Balikuchi ...	Patidarang mauza ...	New moon day in the month of Magh.	1,000
Dorakahara .	Madartola mauza ...	On the 6th day after the new moon of Magh,	Do.
Jagra ...	Pakoa mauza, Nalbari tahsil.	2nd day after the new moon of Magh.	1,200
Bangaon ..	Ditto ...	Durgapuja ...	800
Katra ...	Batasgila mauza, Nalbari tahsil.	2nd day after the new moon of Magh.	1,200
Kakaya ...	Dharmapur mauza, Nalbari tahsil.	9th Baisakh ...	700
Do. ...	Ditto ...	Durgapuja ...	1,000
Balikaria ...	Batasgila mauza, Nalbari tahsil.	11th Baisakh ...	800

STATEMENT E—(*concluded*).

List of fairs.

Name of place at which fair is held.	Mauza or tahsil in which situated.	Date at which held.	Estimated number of people attending.
Kaihati ...	Dharmapur mauza, Nalbari tahsil.	7th Baisakh ...	200
Darranga ...	Tamulpur tahsil ...	December, January and February.	2,500
Subankhata ...	Ditto	Ditto ...	Do.
Ujanbazar and Cutcherry Compound.	Gauhati tahsil ...	On the Bijaya Dasami day.	3,000
Bileswar ...	Dharmapur mauza ...	7th Baisakh ...	1,000
Do. ...	Ditto ...	Durgapuja ...	2,000
Balilesa ...	Khata mauza ..	8th Baisakh ...	1,200
Balikuchi ...	Ditto ...	During Doljatra	1,200
Chandkuchi ...	Bahjani mauza ...	9th Baisakh ...	1,000
Barnadi ...	Pakoa mauza . .	15th Baisakh ...	1,000
Khudra Makhai Baha.	Nambarbhag mauza...	Suklapratipada of Falgun.	2,000 to 3,000
Natun Sripur ...	Paschim ... Baska ... Mauza ...	Durgapuja ..	1,000 to 1,500
Barpeta Subdivision.			
Barpeta Kirtanghar.	Barpeta ...	Months of Bhadra Asvin, Falgun or Chaitra, and Baisakh.	2,000,to 3,000
Patbausi Kirtanghar.	Do. ...	Baisakh ...	500 to 600
Sarthaibari ...	Sarukhetri mauza ...	Falgun ...	1,0 0—1,200
Bang ...	Bajali tahsil, ..	Magh and Falgun ...	2,000

TABLE I.

Average maximum and minimum temperatures registered at Gauhati.

	January.	February.	March.	April.	May.	June.	July	August.	September.	October.	November.	December.	Year.
Average maximum temperature,	73°·3	78°·0	85°·6	87°·1	87°·4	88°·8	90°·9	89°·8	88·6	86°·7	81°·1	74°·6	84°·3
Average minimum temperature,	48°·8	52°·7	60°·0	67°·4	71°·9	76°·2	78°·1	77°·9	76°·9	70·7	60°·3	51°·0	66°·0

Note.—The figures have been compiled on two years' data.

TABLE II.

Rainfall.

The number of years for which the average has been calculated is shown below the name of each station.

Months.	Average rainfall in inches.					
	Tamulpur (8 years).	Rangia (13 years).	Barpeta (30 years).	Gauhati (50 years).	Barduar (9 years).	Chaygaon (12 years).
January ...	0·56	0·33	0·48	0·60	0·20	0·35
February ...	1·03	0·91	0·72	0·90	0·77	0·86
March ...	2·79	2·91	2·71	2·47	2·07	2·56
April ...	9·28	6·70	9·26	6·20	6·56	6·41
May ...	14·65	12·37	15·41	9·96	8·89	9·90
June ...	11·42	12·17	19·90	12·34	16·84	13·58
July ...	16·45	13·58	16·89	12·49	18·41	13·77
August ...	12·58	10·46	13·25	10·80	18·95	10·99
September ...	10·23	8·22	11·94	7·68	10·90	7·06
October ...	4·98	3·43	4·39	2·99	4·36	2·99
November ...	0·36	0·16	0·29	0·52	0·34	0·30
December ...	0·44	0·22	0·28	0·24	0·32	0·14
Total of year	84·77	71·46	95·52	67·19	88·61	68·91

TABLE III.

Distribution of population.

Tahsil or Mauza.	Population in 1901.	Population in 1891.	Difference.	Area in square miles.	Population per square mile.	Number of persons censused on tea gardens.
Gauhati tahsil ...	46,981	49,394	−2,413	310·37	151	3,617
Palasbari tahsil ...	48,123	53,283	−5,160	152·96	314	332
Chaygaon tahsil ...	18,389	19,170	− 781	175·94	104	920
Boko tahsil ...	30,839	33,288	−2,449	431·66	71	...
Patidarang tahsil ...	53,851	56,412	−2,561	161·45	333	332
Rangia tahsil ...	61,790	58,818	+2 972	193·52	319	...
Tamulpur tahsil ...	28,061	30,575	−2,514	421·21	66	627
Hajo tahsil ...	68,689	84,269	−15,580	226·27	303	...
Nalbari tahsil ...	72,370	77,284	−4,914	117·93	613	...
Barama tahsil ...	44,159	36,051	+8,108	140·04	315	...
Barpeta mauza ...	15,550	19,023	−3,473	122·02	127	...
Bajali tahsil ...	47,425	44,286	+3,139	195·53	242	...
Raha tahsil ...	23,530	27,854	−4,324	245·50	95	...
Sarukhetri mauza ...	7,036	17,998	−10,962	54·47	129	...
Paka mauza ...	1,384	5,240	−3,856	55·18	25	...
Chenga mauza ...	4,119	4,834	− 715	44·46	92	...
Bagribari mauza ...	1,575	6,817	−5,242	182·97	8	...
Hastinapur mauza ...	2,832	2,955	− 123	34·60	81	...
Bijni mauza ...	12,484	6,698	−5,786	285·64	43	...
Total district ...	589,187	634,249	−45,062	(a)3,858·00	153	5,828

(a) The area of the district was furnished by the Assistant Surveyor-General, Calcutta, and does not tally with the sum total of the areas of mauzas, as the latter figures were obtained from the district officer.

TABLE IV.

General Statistics of population.

Particulars.	Gauhati.		Barpeta.		Total District.		
	Males.	Females.	Males.	Females.	Persons.	Males.	Females.
1	2	3	4	5	6	7	8
Population 1901	234,716	238,536	58,153	57,782	589,187	292,869	296,318
1891	250,815	247,729	70,214	65,491	634,249	321,029	313,220
1881	511,930		133,030		644,960	329,061	315,899
1872	217,415	198,048	75,273	70,945	561,681	292,688	268,993
Variation 1891-1901	—16,039	—9,193	—12,061	—7,709	—45,062	—28,160	—16,902
1881-1891	—13,386		+2,675		—10,711	—8,032	—2,679
1872-1881	+96,467		—13,188		+ 83,279	+36,373	+46,906
1901							
Religion—Total Hindus	159,925	161,236	44,029	42,173	407,363	203,954	203,409

Mahapurushias	21,733	23,669	16,286	16,167	77,855	38,019	39,836
Other Vaishnavas... ...	124,992	127,006	25,322	24,126	301,446	150,314	151,132
Saktists	4,161	2,768	374	56	7,359	4,535	2,824
Sivaites	418	116	30	9	573	448	125
Muhammadans	24,865	23,895	2,543	2,398	53,701	27,408	26,293
Animistic	48,442	52,432	11,525	13,200	125,599	59,967	65,632
Total Christians	798	670	7	4	1,479	805	674
Baptists	703	592	4	4	1,303	707	596
Other religions	686	303	49	7	1,045	735	310
CIVIL CONDITION—Unmarried ...	136,193	102,212	34,499	25,093	297,997	170,692	127,305
Married	87,773	92,970	21,098	22,412	224,253	108,871	115,382
Widowed	10,750	43,354	2,556	10,277	66,937	13,306	53,631
LITERACY—Literate in Assamese ...	13,719	366	4,026	71	18,182	17,745	437
Literate in English ...	1,355	48	228	1	1,632	1,583	49
Illiterate	219,087	237,937	53,721	57,694	568,439	272,808	295,631
LANGUAGES SPOKEN—Assamese ...	195,621	201,729	46,654	45,758	489,762	242,275	247,487
Bodo or Plains Kachari	20,619	24,673	10,189	11,772	67,253	30,808	36,445
Mikir	4,441	3,585	...	...	8,026	4,441	3,585

TABLE V.

Birth place, race, caste and occupation.

	Gauhati.		Barpeta.		Total District.		
	Males.	Females.	Males.	Females.	Persons.	Males.	Females.
1	2	3	4	5	6	7	8
Birth place.—Born in district ...	223,153	333,131	56,308	57,240	569,832	279,461	290,371
Born in other parts of Province.	2,656	1,543	638	366	5,203	3,294	1,909
" " Chota Nagpur ...	1,348	881	4	1	2,234	1,352	882
" " other parts of Bengal.	3,584	1,558	708	55	5,905	4,292	1,613
" " United Provinces...	1,082	309	167	21	1,579	1,249	330
" " Central Provinces,	420	340	8	2	770	428	342
" " Nepal	978	282	225	74	1,559	1,203	356
Elsewhere ...	1,495	492	95	23	2,105	1,590	515
Race and caste.—Brahman	9,375	9,702	2,024	2,044	23,145	11,399	11,746
Eurasian	25	11	...	...	36	25	11
European (*a*) ...	36	28	...	...	64	36	28
Ganak	2,399	2,715	455	479	6,048	2,854	3,194
Garo	2,524	2,617	3	...	5,144	2,527	2,617

Jogi	5,874	6,055	2,762	2,763	17,454	8,636	8,818
Kachari	31,849	36 119	11,973	12,863	92,104	43,122	48,982
Kalita	44,554	44 208	13,991	12,837	115,590	58,545	57,045
Kayastha	1,868	1.639	480	335	4 322	2,348	1,974
Kewat, Kaibartta and Mahishya Vaisya	18,439	20,351	2,976	2,708	44,474	21,415	23,059
Kumhar	2,865	2,841	480	492	6,678	3,345	3,333
Mikir	5,431	5,162	...	...	10.593	5,431	5,162
Nadiyal	4,296	4,401	900	921	10,518	5,196	5,322
Namasudra ...	4,531	4,586	839	662	10 618	5,370	5,248
Napit	2,121	2,285	311	314	5,031	2,432	2,599
Rabha	8,029	8,297	10	5	16,341	8,039	8,302
Rajbansi and Koch ..	34,636	34,033	12,574	12,710	93,953	47,210	46,743
Saloi	3,450	3,603	187	186	7,426	3,637	3,789
Shaha	5,257	5 889	1,494	1,440	14,080	6,751	7.329
Totla	3,263	3.400	175	177	7,015	3,438	3,577
OCCUPATION.—Workers	...	...	...	...	295,331	173,204	122,127
Dependents	...	...	...	...	293,856	...	...
Total supported							
Landholder	132,416	132 819	37.237	35.717	338,189	169,653	168 536
Tenants	52,034	54,041	6,086	6 789	118,950	58,120	60,830
Garden coolies	3,295	3,166	124	147	6,732	3,419	3,313
Farm servants	4,945	1,804	1,356	81	8,186	6,301	1,885
Fishermen	4,821	5,227	1,104	947	12.099	5,925	6,174
Grain and pulse dealers ...	1,311	604	1,579	1,759	5,253	2,890	2,363
General labourers ..	3 432	1,718	245	212	5,607	3,677	1,930
Mendicants not in conection with religion.	6,096	12,282	1,954	3,625	23,957	8,050	15,907

(*a*) Includes allied races.

TABLE VI.

Vital Statistics.

Year.	Population under registration in 1901.	Ratio of births per mille.	Ratio of deaths per mille.	Ratio of deaths per mille from—			
				Cholera.	Small-pox.	Fever.	Bowel complaints.
1901	589,187	31·36	23·04	2·88	0·09	16·97	0·84
1902	589,187	31·71	22·99	2·51	0·15	16·42	1·14
1903	589,187	33·19	22·73	1·83	0·08	16·99	1·23
1904	589,187	29·55	17·81	0·41	0.15	14·22	0·90
1905							
1906							
1907							
1908							
1909							
1910							
1911							
1912							

TABLE VII.

Crop Statistics.

Particulars.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
	Acres	Acres	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Total cropped area...	531,276	575,341	601,262	601,597								
Rice ...	404,459	432,566	450,276	459,610								
Mustard ...	44,045	57,437	64,790	60,543								
Sugarcane ...	3,953	5,067	4,366	4,353								
Pulse ...	18,[illegible]94	20,173	22,680	22,361								
All other crops ...	60,525	60,098	59,150	54,730								
TEA.	*1901*	*1902*	*1903*	*1904*	*1905*	*1906*	*1907*	*1908*	*1909*	*1910*	*1911*	*1912*
Gauhati ..												
Number of gardens,	23	19	19	19								
Area in acres ...	18,642	16,140	16,140	16,898								
Area under plant — held by Europeans,	3,419	3,465	3,227	3,400								
Area under plant — held by natives	279	251	250	259								
Outturn in lbs. ...	629,350	542,369	638,089	735,002								
Labour force ...	3,472	3,019	2,155	2,416								
Labourers including dependents imported during the year	63	...	43*	131								

*Henceforth these figures relate to the period from 1st July to 30th June.

TABLE VIII.

Reserved Forests.

Name of reserve.	Area in square miles.	Receipts.											
		1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.
Barjuli	2	50	404	317	850								
Jaipur	1	...	...	40	350								
Nampathar	1	...	...	...	...								
Baradobha	2	...	73	75	486								
Gizang	7	663	298	338	1,138								
Jharikhuri	4	...	45	162	...								
Mugakhal, 284 acres		...	...	...	165								
Sursuria Hill	2	300	116	57	20								
Khurkhuri, 149 acres ...	..	336	84	...	...								
Garubaldha, 280 acres ...	...	6	...	50	90								
Taraibari	1	271	132	240	322								
Ghoraputa, 120 acres ...	...	152	...	50	100								

Khatkhati Hill ...	...	1	110	10	83	176											
Khaksi Sikrabura	...	4	1,325	599	1,372	1,090											
Dumpara ...	...	1	327	70	351	564											
Simla Hill ...	..	1	107	60	115	130											
Dudkhuri, 147 acres	...	...	...	..	10	...											
Milmilia ...	...	7	1,135	617	298	3,672											
Chaygaon ...	...	4	1,159	259	633	2,769											
Kulsi Plantation*...	...	6	375	195	43	4,046											
Mayang ...	...	8	830	514	865	1,345											
Mataikhar ...	...	4	1,890	1,563	1,482	4,903											
Kawasing ...	...	6	2,049	727	1,208	4,612											
Jarasal ...	...	2	9	...	...	3,054											
Hajo, 243 acres ...	...	...	1	...	17	17											
Darranga ...	...	9	6	1	11	10											
Pantan ...	...	34	3,998	3,375	5,213	3,661											
Barduar ...	...	25	5,833	3,074	4,085	5,299											
Rani ...	...	17	2,184	900	1,692	14,476											
Sildar Hill, 127 acres	...	...	...	...	...	..											

*Does not include sale proceeds of rubber.

TABLE IX.

Fire protection and outturn of timber and fuel and value of minor forest products.

Details.	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
Area under protection sq. miles.	148	149	149	149								
Area protected sq. miles..	140	149	149	149								
Percentage	95	100	100	100								
Cost Rs.	1,542	1,458	1,442	1,544								
Reserved Forests												
Area in sq. miles	148	149	149	149								
Outturn (Govt. and purchaser only).												
Timber c. ft. ...	141,804	98,728	98,582	124 491								
Fuel c. ft. ...	...	800	552	400								
Unclassed Forests.												
Area in sq. miles	2,110	2,292	2,306	2,294								
Outturn (Govt. and purchaser only).												
Timber c. ft. ...	91,458	80,376	69,367	92,161								
Fuel c. ft. ...	15,672	13,008	15,320	14,732								
Lac Rs. ...	.	..	414	1,765								
Rubber Rs. ...	7,430	6,194	1,015	11,179								
Forest receipts Rs. ..	63,434	49,256	58,781	80,085								
Forest expenditure Rs. ...	31,707	24,711	38,129	56,819								
Balance Rs. ...	31,727	24,545	20,652	23,266								

TABLE X.

Prices of food staples in seers obtainable per rupee.

		Gauhati.			Barpeta.		
		Common rice	Salt.	Matikalai.	Common rice.	Salt.	Matikalai.
1880	2nd week of February	13	8	18	...	...	...
	Do. do. of August	16	8	20	...	...	...
1890	Do. do. of February	20	10	20	21¼	10	18
	Do. do. of August	15	9	16	18½	10½	18
1900	Do. do. of February	19	10	16	23	9½	20
	Do. do. of August	14½	10	13	16	10	13¼
1901	Do. do. of February	12½	10	12½	12	9½	12
	Do. do. of August	9	10	12½	9	9	12
1902	Do. do. of February	13½	10	14	14	9	16
	Do. do. of August ...	11	10	13	12	9	15
1903	Do. do. of February	13	10	15	14	9	15
	Do. do. of August	12¼	11	15	16	11	13
1904	Do. do. of February	16	11	14	20	10	15
	Do. do. of August ..	13	11	15	20	11	16
1905	Do. do. of February	16	11	15	20	12¼	16
	Do. do. of August						
1906	Do. do. of February						
	Do. do of August						
1907	Do. do. of February						
	Do. do. of August						
1908	Do. do. of February						
	Do. do. of August						
1909	Do. do. of February						
	Do. do. of August						
1910	Do. do. of February						
	Do. do. of August						
1911	Do. do. of February						
	Do. do. of August						
1912	Do. do. of February						
	Do. do. of August						

TABLE

Statistics of Criminal

Heads of crime.	1902.		1903.		1904.	
	True.	Detected.	True.	Detected.	True.	Detected.
GAUHATI SUBDIVISION.						
Criminal Justice.						
Number of cases.						
(i) Rioting or unlawful assembly, sections 143—153, 157, 158 and 159	11	8	14	10	8	6
(ii) Other offences against the State, public tranquillity, &c.	6	3	7	6	10	7
(iii) Murder, attempt at murder, and culpable homicide, sections 302—304, 307, 308 and 396.	4	...	1	1	4	3
(iv) Grievous hurt and hurt by dangerous weapon, sections 324—326, 329, 331, 333, 335.	7	5	7	6	12	6
(v) Serious criminal force, sections 353, 354, 356 and 357	6	3	5	4	4	1
(vi) Other serious offences against the person.	5	1	11	9	14	2
(vii) Dacoity, sections 395, 397 and 398	3	2	1	...	.	...
(viii) Serious mischief, including mischief by killing, poisoning or maiming any animal, sections 270, 281, 282, 428, 429, 430—433 and 435—440.	9	1	13	6	10	3
(ix) House-breaking and serious house trespass, sections 449—452, 454, 455 and 457—460.	116	15	103	33	125	18
(x) Wrongful restraint and confinement, sections 341—344.	6	4	11	9	9	5

XI.

and Civil Justice.

1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.	
True.	Detected.	True.	Detected.	True.	Detected.	True	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.

TABLE

Statistics of Criminal

Heads of crime.	1902.		1903.		1904.	
	True.	Detected.	True.	Detected.	True.	Detected.
GAUHATI SUBDIVISION—(*concld.*)						
Criminal Justice.						
Number of cases.						
(xi) Other serious offences against the person and property or against property.	2	...	...	...	3	...
(xii) Theft sections 379 and 382 ...	146	52	123	79	131	44
(xiii) Receiving stolen property, sections 411 and 414.	7	6	28	27	18	16
(xiv) Lurking and criminal house trespass, sections 453, 456, 447 and 448	25	6	12	8	23	6
(xv) Other minor offences against property.	22	6	6	5	6	2
Total ...	375	112	342	203	377	119
BARPETA SUBDIVISION.						
Criminal Justice.						
Number of cases.						
(i) Rioting or unlawful assembly, sections 143-153, 157, 158 and 159.	2	2	1	...	3	1
(ii) Other offences against the State, public tranquillity, &c.	2	2	1	...	...	...
(iii) Murder, attempt at murder, and culpable homicide sections 302—304, 307, 308 and 396.	3	...	1	1	1	1
(iv) Grievous hurt and hurt by dangerous weapon, sections 324—326, 329, 331, 333, and 335.	6	4	6	...	2	1

XI.

and Civil Justice—(continued).

1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.	
True.	Detected.	True.	Detected	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.

TABLE

Statistics of Criminal

Heads of crime.	1902.		1903.		1904.	
	True.	Detected.	True.	Detected.	True.	Detected.
BARPETA SUBDIVISION—(*concld.*)						
Criminal Justice. Number of cases.						
(v) Serious criminal force, sections 353, 354, 356 and 357.	...	...	2	2	3	1
(vi) Other serious offences against the person.	2	...	2	...	7	3
(vii) Dacoity, sections 395, 397, and 398	...	...	...	...	1	1
(viii) Serious mischief, including mischief by killing, poisoning or maiming any animal, sections 270, 281, 282, 428, 429, 430—433 and 435—40.	2	...	3	...	1	0
(ix) House-breaking and serious house trespass, section 449—452, 454, 455, and 457—460.	27	3	25	1	35	8
(x) Wrongful restraint and confinement, sections 341—344.	3	...	1	...	1	...
(xi) Other serious offences against the person and property or against property.	...	...	...	...	...	...
(xii) Theft, sections 379 and 382 ...	35	18	19	7	21	10
(xiii) Receiving stolen property, sections 411 and 414.	4	2	8	6	3	3
(xiv) Lurking and criminal house trespass, sections 453, 456, 447 and 448	12	6	8	2	11	6
(xv) Other minor offences against property.	1	...	...	...	...	...
Total ...	99	37	77	19	89	35

IX.

and Civil Justice—(continued).

1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.	
True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True	Detected.	True.	Detected.	True.	Detected.

TABLE

Statistics of Criminal

Heads of crime.	1902.		1903.		1904.	
	True.	Detected.	True.	Detected.	True.	Detected.
DISTRICT TOTAL.						
Criminal Justice.						
Number of cases.						
(i) Rioting and unlawful assembly, sections 143—153, 157, 158 and 159.	13	10	15	10	11	7
(ii) Other offences against the State, public tranquillity, &c.	8	5	8	6	10	8
(iii) Murder, attempt at murder, and culpable homicide, sections 302—304, 307, 308 and 396.	7	...	2	2	5	4
(iv) Grievous hurt and hurt by dangerous weapon, sections 324—326, 329, 331, 333 and 335.	13	9	13	6	14	7
(v) Serious criminal force, sections 353, 354, 356 and 357.	6	3	7	6	7	2
(vi) Other serious offences against the person.	7	1	13	9	21	5
(viii) Decoity, sections 395, 397 and 398.	3	2	1	...	1	1
(viii) Serious mischief, including mischief by killing, poisoning or maiming any animal, sections 270, 281, 282, 428, 429, 430—433 and 435—440.	11	1	16	6	11	3
(ix) House-breaking and serious house trespass sections 449—452, 454.455 and 457—460.	143	18	128	34	160	26
(x) Wrongful restraint and confinement, sections 341—344.	9	4	12	9	10	5

XI.

and Civil Justice—(continued).

1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.	
True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected	True.	Detected.

TABLE

Statistics of Criminal

Heads of crime.	1902.		1903.		1904.	
	True.	Detected.	True	Detected.	True.	Detected.
DISTRICT TOTAL—(*concld.*)						
Criminal Justice.						
Number of cases.						
(xi) Other serious offences against the person and property or against property.	2	...	...	...	3	...
(xii) Theft, sections 379 and 382 ...	181	70	142	86	152	54
(xiii) Receiving stolen property, sections 411 and 414.	11	8	36	33	21	19
(xiv) Lurking and criminal house trespass, sections 453, 456, 447 and 448.	37	12	20	10	34	12
(xv) Other minor offences against property.	23	6	6	5	6	2
Total ...	474	149	419	222	466	154
Civil Justice.						
Suits for money and moveables ..	1,415		1,554			
Title and other suits	59		74			
Rent suits	97		129			
Total ...	1,571		1,757			

XI.

and Civil Justice—(concluded).

1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.	
True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.	True.	Detected.

TABLE

Fluctuations in

Proportion of fluctuating area to settled area

	1900-01.	190 -02.	1902-03.	1903-04.
	Acres.	Acres.	Acres.	Acres.
Gauhati Subdivision.				
Settled area	525,509	510,976	522,105	528,123
Area excluded from settlement	45,310	30 300	18,712	18,723
Area included in settlement ...	33,690	35,085	30,329	29,059
Revenue demand Rs. ...	10,33,319	9,78,525	10,01,009	10,14,186
Barpeta Subdivision.				
Settled area	93,705	118,182	125,546	127,097
Area excluded from settlement	28,452	15,477	13,099	15,160
Area included in settlement ..	19,655	20,992	21,675	17,456
Revenue demand Rs. ...	2,04,125	2,20,116	2,32,073	2,36,124
Total district.				
Settled area	619,214	629 158	647,651	655,220
Area excluded from settlement	73,762	45,777	31,811	33,883
Area included in settlement ...	53,345	56,077	52,004	46,515
Revenue demand Rs. ...	12,37,444	11,98,641	12,33,082	12,50,310

XII.

settled area.

in 1903-04 { Gauhati subdivision—9 per cent.
Barpeta subdivision—50 „

1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.

TABLE

Fin

Principal heads.	1890-91.	1900 01.	1901-02.	1902-03.
	Rs.	Rs.	Rs.	Rs.
Land revenue (ordinary) ...	9,51,549	11,91,955	11,46,625	12,27,512
" " (miscellaneous) ..	23,502	20,609	26,352	31,896
Provincial rates	76,990	84,177	91,869	99,365
Judicial stamps	45,553	46,637	49,906	53,288
Non-judicial stamps ...	15,398	14,120	15,236	15,778
Opium	1,96,157	1,60,119	1,53,274	1,62,055
Country spirits	7,938	17,612	15,379	17,756
Ganja	20,977	34,293	30,963	33,381
Other heads of excise ...	883	1,827	1,703	3,062
Assessed taxes	12,868	16,110	16,235	14,897
No. of assessees per mille ...	1	1	1	1
Forests	54,066	63,434	49,256	58,781
Registration	1,239	1,048	1,049	1,373
Total ...	14,07,120	16,51,941	15,97,847	17,19,144

TABLE

Miscellaneous

Particulars.	1900-01.	1901-02.	1902 03.	1903-04.
	Rs.	Rs.	Rs.	Rs.
GAUHATI SUBDIVISION—				
Fisheries	6,502	8,387	11 559	16,543
Total revenue ...	8,623	11,348	13,958	24,429
BARPETA SUBDIVISION—				
Fisheries	11,986	14 605	17,845	18,206
Total revenue ...	11,986	15,004	17,938	18,444
TOTAL DISTRICT—				
Fisheries	18,468	22,992	29,404	34,749
Other heads	2,141	3,360	2,492	8,124
Total revenue ...	20,609	26,352	31,896	42,873

XIII.

ance—(Total collections).

1903-04	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
12,29,657								
42,873								
1,02,818								
51,078								
16,369								
1,76,923								
18,114								
35,058								
2,669								
11,610								
...								
80,085								
1,294								
17,68,548								

XIV.

land revenue—(Total collections).

1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11	1911 12
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.

TABLE
Land

Particulars.	1900-01.	1901-02.	1902-03.	1903-04.
	Acres.	Acres.	Acres.	Acres.
GAUHATI SUBDIVISION—				
Total land settled for cultivation of ordinary crops.	498,967	485,297	496,509	502,478
Held on ordinary tenure ...	331,870	336,565	348,778	355,783
Held revenue free (Lakhiraj)...	32,331	32,331	33,129	33,128
Held at half rates (Nisfi-khiraj.)	134,766	116,401	114,602	113,567
Total land settled for cultivation of special staples.	24,972	24,085	23,978	24,000
Area of fee-simple and commuted grants.	16,983	16,983	16,983	16,981
Area settled under other special rules.	951	488	488	496
Area settled on 30 years' lease...	5,661	5,274	5,175	5,173
Area held under ordinary rules or re-settled on expiry of 30 years' lease.	1,377	1,340	1,332	1,350
Total land settled under other tenures.	1,570	1,594	1,618	1,645
Total settled area of subdivision ...	525,509	510,976	522,105	528,123
Total unsettled area of ,, ...	1,128,251	1,142,784	1,131,655	1,125,637
BARPETA SUBDIVISION—				
Total land settled for cultivation of ordinary crops	92,739	117,213	124,576	126,116
Held on ordinary tenure ...	76,689	83,087	90,630	92,203
Held revenue free (Lakhiraj)...	779	779	779	779
Held at half rates (Nisfi-khiraj).	15,271	33,347	33,167	33,134
Total land settled under other tenures	966	969	970	981
Total settled area of subdivision ..	93,705	118,182	125,546	127,097
Total unsettled area of subdivision,	721,655	697,178	689,814	688,263
TOTAL DISTRICT—				
Total land settled for cultivation of ordinary crops.	591,706	602,510	621,085	628,594
Held on ordinary tenure ...	408,559	419,652	439,408	447,986
Held revenue free (Lakhiraj)	33,110	33,110	33,908	33,907
Held at half rates (Nisfi-khiraj)	150,037	149,748	147,769	146,701
Total land settled for cultivation of special staples.	24,972	24,085	23,978	24,000
Area of fee-simple and commuted grants.	16,983	16,983	16,983	16,981
Area settled under other special rules.	951	488	488	496
Area settled on 30 years' lease...	5,661	5,274	5,175	5,173
Area held under ordinary rules or re-settled on expiry of 30 years' lease.	1,377	1,340	1,332	1,350
Total land settled under other tenures	2,536	2,563	2,588	2,626
Total settled area of the district ...	619,214	629,158	647,651	655,220
Total unsettled area of the district	1,849,906	1,839,962	1,821,469	1,813,900

XV.

tenure.

1904-05	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11	1911-12.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.

TABLE XVA.

Settled and unsettled area in tahsils and mauzas in 1903-04.

Name of tahsil or mauza.	Total area.	Settled area.	Unsettled area.
	Sq. miles.	Sq. miles.	Sq. miles.
GAUHATI SUBDIVISION.			
Tahsils—Barama	140	84	56
Chaygaon	176	48	128
Gauhati	310	72	237
Hajo	226	109	117
Nalbari	118	91	27
Palasbari	153	72	81
Patidarang	163	117	46
Rangia	193	127	66
Tamulpur	422	50	372
Mauzas—Bagai Bangaon	117	11	106
Boko and Kharija Boko ...	36	7	29
Chamaria (Pub and Paschim,)	187	21	166
Luki Bekeli	92	15	77
Barpeta Subdivision.			
Tahsil—Bajali	196	86	110
Mauzas—Bagribari	183	4	179
Barpeta	119	11	108
Do. (town)	1	1	...
Bhawanipur and Hastinapur ...	144	32	112
Bijni	286	24	262
Chenga	44	5	39
Dumkachakabausi	38	14	24
Paka	55	3	52
Rupsi	98	12	86
Sarukhetri	54	7	47

1022 2527

TABLE

Ex-

Principal heads.		1900-01.	1901-02.	1902-03.
GAUHATI SUBDIVISION—				
Number of opium shops ...	...	90	89	92
Amount paid for licenses	... Rs.	22,001	26,098	25,838
		M. s ch.	M. s. ch	M. s. ch.
Opium issued ...	...	108 23 15	98 6 11	107 3 0
Duty on opium sold ...	... Rs.	1,23,804	1,11,910	1,22,066
Number of ganja shops ...	...	24	24	24
Amount paid for licenses	.. Rs.	12,693	13,960	14,390
		M. s. ch.	M. s. ch.	M. s. ch.
Amount of ganja issued	...	42 3 0	30 15 8	34 18 0
Duty on ganja sold ...	... Rs.	15,196	10,940	12,402
Number of country spirit shops	...	11	11	9
Amount paid for licenses	... Rs.	16,868	14,635	17,012
Number of distilleries ...	...			
Amount of liquor issued	...			
Still-head duty ...	...			
Number of retail shops ..	...			
Amount paid for licenses	...			
Other heads of excise revenue	... Rs.	1,685	1,579	2,930
BARPETA SUBDIVISION—				
Number of opium shops .	...	20	20	20
Amount paid for licenses	... Rs.	4,140	3,924	2,552
		M. s. ch.	M. s. ch.	M. s. ch.
Opium issued ...	...	8 36 15	9 37 15	10 7 0
Duty on opium sold ...	... Rs.	10,174	11,342	11,599
Number of ganja shops	...	7	7	7
Amount paid for licenses	... Rs.	3,495	3,396	2,708
		M. s. ch.	M. s. ch.	M. s. ch.
Amount of ganja issued	...	8 26 0	7 16 0	11 29 0
Duty on ganja sold ...	... Rs.	2,909	2,667	3,881
Number of country spirit shops	...	2	2	2
Amount paid for licenses	... Rs.	744	744	744
Number of distilleries ...	...			
Amount of liquor issued	...			
Still-head duty	...			
Number of retail shops ...	...			
Amount paid for licenses	..			
Other heads of excise revenue	... Rs.	142	124	132
TOTAL DISTRICT—				
Number of opium shops...	...	110	109	112
Amount paid for licenses	... Rs.	26,141	30,022	28,390
		M. s. ch.	M. s. ch.	M. s. ch.
Opium issued ...	...	117 20 14	108 4 10	117 10 0
Duty on opium sold ...	.. Rs.	1,33,978	1,23,252	1,33,665

XVI.

cise.

1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
93								
29,902								
M. s. ch.								
116 23 0								
1,33,036								
24								
15,458								
M. s. ch.								
32 24 0								
12,671								
9								
17,370								
2,517								
19								
2,556								
M. s. ch.								
10 1 0								
11,429								
7								
2,545								
M. s. ch.								
12 36 0								
4,384								
2								
744								
152								
112								
32,458								
M. s. ch.								
126 29 0								
1,44,465								

TABLE

Ex-

Principal heads.		1900-01.	1901-02.	1902-03.
Number of ganja shops ...	...	31	31	31
Amount paid for licenses	... Rs.	16,188	17,356	17,098
		M. s. ch.	M. s. ch.	M. s. ch.
Amount of ganja issued	...	50 29 0	37 31 8	46 7 0
Duty on ganja sold ...	... Rs.	18,105	13,607	16,283
Number of country spirit shops	...	13	13	11
Amount paid for licenses	... Rs.	17,612	15,379	17,756
Number of distilleries ...	...			
Amount of liquor issued...	...			
Still-head duty ...	...			
Number of retail shops ...	...			
Amount paid for licenses	...			
Other heads of excise revenue	...	1,827	1,703	3,062

XVI.

cise—(concluded).

1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
31								
18,003								
M. s. ch.								
45 20 0								
17,055								
11								
18,114								
2,669								

TABLE XVII.

Income and Expenditure of Local Boards.

Gauhati.

Sources of income.	Income. 1890-91.	Income. 1900-01.	Heads of expenditure.	Expenditure. 1890-91.	Expenditure. 1900-01.
	Rs.	Rs.		Rs.	Rs.
Provincial rates ...	63,561	69,470	Post office ...	2,643	3,898
Police ...	1,718	1,804	Administration ...	265	265
Tolls on ferries ...	4,505	3,818	Education ...	19,238	21,338
Contributions ...	79	...	Medical ...	5,013	10,434
Debt ...	...	719	Civil works ...	32,863	64,716
Miscellaneous ...	116	6,844	Debt ...	...	1,717
			Miscellaneous ...	2,311	2,956
Total ...	69,979	82,655	Total ...	62,333	1,05,324

Barpeta.

Sources of income.	Income 1890-91.	Income 1900-01.	Heads of expenditure.	Expenditure. 1890-91.	Expenditure. 1900-01.
	Rs.	Rs.		Rs.	Rs.
Provincial rates ...	13,455	14,824	Post office ...	1,332	2,524
Police ...	941	790	Administration ...	127	127
Tolls on ferries ...	1,635	444	Education ...	5,775	5,260
Contributions ...	7,300	8,680	Medical ...	1,291	2,500
Debt ...	...	1,711	Civil works ...	9,609	10,334
Miscellaneous ...	96	211	Debt ...	...	1,693
			Contributions ...	...	3,326
			Miscellaneous ...	1,526	896
Total ...	23,427	26,660	Total ...	19,660	26,660

TABLE XVIII.

Municipal.

Gauhati Municipality.

Sources of income.	Income. 1890-91.	Income. 1900-01.	Heads of expenditure.	Expenditure. 1890-91.	Expenditure. 1900-01.
	Rs.	Rs.		Rs.	Rs.
Opening balance ...	1,776	6,781			
Tax on houses and lands.	4,674	7,614	Administration ...	6,398	2,491
Pounds ...	1,690	3,493	Conservancy ...	5,736	14,729
Fees from markets ...	3,764	6,675	Public works ...	1,547	9,705
Grants from Govt. and Local Funds ...	..	10,000	Public instruction ...	1,552	1,429
Ferry receipts ...	6,995	630			
Water rate ...	5,842	9,943	Water-supply ...	6,900	13,606
Conservancy ...	296	4,183	Other heads ...	3 093	8,342
Other sources ...	910	3,906	Closing balance ...	721	2,923
Total ...	25.947	53,225	Total ...	25,947	53,225

Barpeta Municipality.

Sources of income	Income. 1890-91.	Income. 1900-01.	Heads of expenditure.	Expenditure. 1890-91.	Expenditure. 1900-01.
	Rs.	Rs.		Rs.	Rs.
Opening balance ...	2,567	14.224			
Tax on houses and lands.	2,027	3,842	Administration ...	757	861
Pounds ...	1,081	982	Conservancy ...	840	2,714
Fees from markets ...	18	302	Public works ...	1,258	2,500
Grants from Govt. and Local Funds ...	500	2,500	Public instruction ...	362	448
Ferry receipts ...	1,784	1,710	Other heads ...	1,266	1,834
Other sources ...	267	355	Closing balance ...	3,761	15.558
Total ...	8,244	23,915	Total ...	8,244	23,915

TABLE XIX.

Strength of Police Force.

Particulars.	1881.	1891.	1901.
CIVIL POLICE.			
SUPERVISING STAFF.			
District and Assistant Superintendent	1	1	1
Inspectors	2	2	2
SUBORDINATE STAFF.			
Sub-Inspectors	7	7	11
Head Constables	20	30	25
Constables	152	252	290
Union and Municipal Police	39	..	...
Total expenditure ... ... Rs.	43,418	42,943	70,228

Actual strength for 1881 and sanctioned strength for other years.

As the full sanctioned number of Sub-Inspectors was not entertained during the year 1901, only the actual number of Sub-Inspectors and Head Constables is shown for that year.

TABLE XX.

Police Stations and Outposts in 1904.

	Name of Police Station or Outpost.	SANCTIONED STRENGTH.			
		Sub-Inspectors.	Head Constables.	Constables.	Total.
GAUHATI.	Barama O. P.	1	...	6	7
	Boko O. P.	1	..	6	7
	Chaygaon O. P. ...	...	1	6	7
	Gauhati P. S. including Latasil and Bharalu outposts.	3	...	15	18
	Hajo O. P.	2	...	8	10
	Kamalpur O. P.... ...	1	...	6	7
	Nalbari P. S.	1	1	10	12
	Palasbari P. S.	1	1	10	12
	Rangia P. S.	2	...	10	12
	Sonapur O. P.	1	...	6	7
	Tamulpur O. P.... ...	1	...	6	7
BARPETA.	Bajali O. P.	1	...	8	9
	Barpeta P. S.	2	...	14	16
	Raha O P.	1	...	6	7

TABLE XXI.

Jail Statistics.

Gauhati Jail.

		1881.	1891.	1901.
Average daily population	Male ...	294	153	199
	Female ...	11	1	1
Rate of jail mortality per 1,000		111	78	30
Expenditure on jail maintenance		Rs. 20,251	Rs. 12,604	Rs. 17,682
Cost per prisoner (excluding civil prisoners)* ...		34	38	53
Profits on jail manufactures		11,943	5,171	65
Earnings per prisoner (†)		39	35	...

Barpeta Subsidiary Jail.

		1881.	1891.	1901.
Average daily population	Male ...	8	7	10
	Female ...	...	...	...
Rate of jail mortality per 1,000		...	...	98
Expenditure on jail maintenance		Rs. 1,234	Rs. 905	Rs. 573
Cost per prisoner (excluding civil prisoners)* ...		24	26	33
Profits on jail manufactures		355	175	180
Earnings per prisoner (†)		57	27	31

* On rations and clothing only.
† Calculated on the average number sentenced to labour.

TABLE XXII.

Education.

	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.
COLLEGES.												
Number	...	1	1									
Number of boys	...	57	72									
Number of boys passing F. A. ...	...	10	13									
Number of boys passing B. A. ...	...	...	...									
SECONDARY SCHOOLS.												
High Schools.												
Number	3	3	3									
Number of boys reading in High School Classes	125	165	165									
Number of boys reading in Middle School Classes.	134	126	158									
Number of boys reading in Primary Classes.	229	290	277									
Middle English Schools.												
Number	3	3	4									
Number of boys reading in Middle School Classes.	59	84	64									

Number of boys reading in Primary Classes.	178	196	287
Middle Vernacular Schools.			
Number	8	8	7
Number of boys reading in Middle School Classes.	127	144	111
Number of boys reading in Primary Classes.	468	445	395
PRIMARY SCHOOLS.			
Upper Primary Schools.			
Number	12	12	12
Number of boys reading in Upper Primary Classes.	157	165	117
Number of boys reading in Lower Primary Classes	537	465	485
Lower Primary Schools.			
Number	262	262	260
Number of boys reading in three Upper Classes.	(a)9,789	(a)9,543	4,087
Number of boys reading in Lower Classes	...	...	5,312
FEMALE EDUCATION.			
Number of Girls' Schools	8	8	8
Number of girls reading (whether in Girls' or Boys' Schools) in High Schools.	...	...	...
Middle English Schools	...	...	...
Middle Vernacular Schools ..	56	58	61
Upper Primary Schools	..	...	...
Lower Primary School	398	327	304

(a) Separate figures not available.

TABLE XXIII.

Educational Finance.

Particulars.	No. of institutions.	Expenditure on institutions maintained or aided by public funds in 1900-01 from— Provincial revenues.	District and municipal funds.	Fees.	Other sources.	Total.	Expenditure per head of pupil.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs. a. p.
Training and Special Schools ...	6	3,664	830	115	548	5,157	56 0 10
Secondary Boys' Schools :—							
Upper (High)	3	3,910	...	8,379	461	12,750	27 14 4
Lower (Middle)	11	2,941	1,947	2,323	733	7,944	9 13 6
Primary Boys' Schools :—							
Upper	12	...	1,897	958	366	3,221	5 6 7
Lower	62	...	18,465	1,399	333	20,197	2 2 10
Girls' Schools	8	...	1,132	61	43	1,236	5 11 6
Total ...	302	10,515	24,271	13,235	2,484	50,505	4 6 7

TABLE XXIV.

Medical

Particulars.	Gauhati.			Barpeta.			Total District.		
	1881.	1891.	1901.	1881.	1891.	1901.	1881.	1891.	1901.
Number of dispensaries ...	1	5	7	1	2	3	2	7	10
Daily average of indoor patients...	11·74	14·31	23·52	·14	·42	1·78	11·88	14 73	25·30
" " " outdoor " ...	3.·53	105·77	139·38	17·86	33·80	80·84	54·39	139·57	220·22
Cases treated	2,523	14,971	37,551	1,365	4,010	14 203	3,887	18,981	51,754
Operations performed ...	151	411	815	10	95	167	161	506	982
Total income Rs. ...	2,419	9,130	18,218	930	3,693	4,169	3,349	12,823	22,387
Income from Government Rs. ...	1,181	1,277	1,920	660	172	190	1,841	1,449	2,110
Income from Local and Municipal Funds Rs. ..	303	5,010	8,464	36	1,502	2,190	339	6,512	10,654
Subscriptions. Rs. ...	750	621	812	...	2,	108	750	642	920
Total expenditure Rs. ...	2,361	9.095	17,977	846	3,348	4.137	3,207	12,443	22,114
Expenditure on establishment Rs.	1,436	4,108	5,638	735	780	1,216	2,171	4,888	6,854
Ratio per mille of persons successfully vaccinated	Not available.						(a) 18·12	23·36	39·99
Cost per case Rs. ...	Do.						Not available	0 2 7	0 2 3

(a) Figure for 1881-82.

TABLE
Dispen-

Name of Dispensary.	1900.		1901.		1902.		1903.		1904.	
	Total cost.	Cases treated.	Total cost.	Cases treated.	Total cost.	Cases treated	Total cost.	Cases treated.	Total cost.	Cases treated.
	Rs.		Rs.		Rs.		Rs.		Rs.	
Gauhati..	8,960	13,942	7,912	14,625	5,780	15,488	6,188	17,617	7,022	15,595
Nalbari...	1,881	3,737	1,642	4,573	737	4,450	1,210	5,328	1,134	7,544
Chaygaon	1,788	3,903	1,677	3,902	771	3,732	1,072	4,015	882	4,741
Palasbari	1,967	3,724	1,608	3,943	813	3,506	1,483	4,977	1,351	6,133
Hajo ...	2,003	5,066	1,618	3,586	709	3,669	1,209	3,555	904	4,030
Rangia	1,636	3,434	1,709	3,548	* ...	3,896	1,165	4,250	1,426	5,201
Boko ...	1,824	2,468	1,811	3,374	903	3,642	1,027	3,329	1,135	3,185
Barpeta...	2,080	6,298	1,832	7,197	1,222	6,474	1,190	11,004	1,312	12,368
Bali ...	1,640	3,145	1,616	3,150	701	3,280	926	3,498	850	3,026
Raha ...	1,274	3,261	688	3,856	579	5,055	854	5,314	336	1,761

* Correct statistics not furnished.

XXV.

saries.

1905.		1906.		1907.		1908.		1909.		1910.		1911.		1912.	
Total cost	Cases treated.	Total cost.	Cases treated.	Total cost.	Cases treated.	Total cost.	Cases treated	Total cost.	Cases treated.	Total cost.	Cases treated.	Total cost.	Cases treated.	To'al cost	Cases treated.

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